NATIONAL SELF-HARM REGISTRY IRELAND

ANNUAL REPORT 2015

EVE GRIFFIN

ELLA ARENSMAN

CHRISTINA B DILLON

PAUL CORCORAN

EILEEN WILLIAMSON

IVAN J PERRY

National Suicide Research Foundation

Suggested Citation:
Griffin, E, Arensman, E, Dillon, CB, Corcoran, P, Williamson, E and Perry, IJ (2016).
National Self-Harm Registry Ireland Annual Report 2015.
Cork: National Suicide Research Foundation.

Published by:
National Suicide Research Foundation, Cork.

ISSN 1649 4326

This report has been commissioned by the HSE National Office for Suicide Prevention.

Hard copies of the Annual Report 2015 are available from:
National Suicide Research Foundation
4th Floor
Western Gateway Building
University College Cork
Ireland

Tel: +353 21 4205551
Email: info@nsrf.ie

Electronic copies of the Annual Report 2015 are available from the website of the National Suicide Research Foundation: www.nsrf.ie

N S R F

Contents

Foreword

Professor Ivan J Perry

Department of Epidemiology and Public Health, University College Cork

Director, National Self-Harm Registry Ireland

Professor Ella Arensman

Director of Research, National Suicide Research Foundation

Research Professor Department of Epidemiology and Public Health, University College Cork

President, International Association for Suicide Prevention

The registry was established over fourteen years ago at the request of the Department of Health and Children, by the National Suicide Research Foundation working in collaboration with the Department of Epidemiology & Public Health, University College Cork. It is funded by the Health Service Executive's National Office for Suicide Prevention. It is the world's first national registry of cases of intentional self-harm presenting to hospital emergency departments.

The Registry provides a unique opportunity to determine and monitor the incidence and repetition of self-harm presentations to hospital emergency departments in Ireland with the aim of identifying high-incidence groups and informing services and practitioners concerned with the prevention of suicidal behaviour. From a public health perspective, the Registry fulfils a major objective in providing real-time data on trends and high risk groups for self-harm in Ireland.

While there seems to be a stabilisation in the rate of self-harm in recent years, we continue to see an increase in methods of self-harm with higher lethality among both men and women. Such high-risk suicidal behaviour is associated with increased levels of suicidal intent, and these patients often require more intensive interventions. Longitudinal data from the Registry is presented in this report, documenting trends over the period 2007-2015. In addition, in-depth data gathered on a sub-group of people engaging in high-risk suicidal behaviour as part of the study: Psychological, psychiatric and work related factors with suicide: A case-control study (SSIS-ACE).

The findings from the Registry continue to highlight groups at risk for self-harm and suicide. While presentations by the homeless account for a minority of attendances, the incidence of self-harm within this population is large. Since 2007 the number of presentations by the homeless has increased

Western Gateway Building,
University College Cork

significantly by 67%, and such presentations are often associated with substance misuse. The magnitude of this increase is linked to the impact of the economic recession and subsequent austerity measures. More evidence around appropriate interventions for such a vulnerable population are necessary, as well as connecting mental health services with relevant community and voluntary agencies.

Information from the Registry informed core actions included in the Irish National Strategy to Reduce Suicide in Ireland, *Connecting for Life*, 2015-2020. Many of the findings from this year's report link closely to activities related to all seven strategic goals. Where appropriate, we have highlighted these links. During the implementation of the actions of *Connecting for Life*, the Registry data will guide the implementation and evaluation of actions, both at the level of the population and health services whereby the Registry forms a key component of the Strategy's Outcomes Framework to monitor progress and to examine the impact of implemented actions over the next five years.

The findings from the Registry provided an informed basis for a five-year research programme, awarded by the Health Research Board: *Individual and area level determinants of self-harm and suicide in Ireland: Enhancing prediction, risk assessment and management of self-harm by health services*. This programme aims to improve the care for people who engage in self-harm, and to reduce repeated self-harm and suicide.

In 2015, the National Self-Harm Registry Ireland was recognised by the World Health Organisation (WHO) as a template for self-harm surveillance for countries at global level. In this regard, the NSRF worked closely with WHO to produce a Practice Manual for Establishing and Maintaining Surveillance Systems for Suicide Attempts and Self-Harm. (http://nsrf.ie/wpcontent/uploads/reports/Suicide_attempts_surveillance_systems_manual_Web_2.pdf)

In December 2015, the NSRF was designated by the World Health Organization as a WHO Collaborating Centre for Surveillance and Research in Suicide Prevention. In this regard, the NSRF is the fourth research centre in the world recognised by the WHO as a centre of excellence in suicide research and prevention.

We would like to acknowledge the on-going commitment and dedication of the data registration officers in ensuring the high quality operation of the Registry. We would also like to commend the hospital staff for their diligence and dedication in meeting the needs of individuals who present to hospital as a result of self-harm.

Professor Ivan J Perry
Professor Ella Arensman

"...a unique opportunity to establish trends and risk groups for hospital-treated self-harm..."

Executive Summary

This is the fourteenth annual report from the National Self-Harm Registry Ireland. The Registry is funded by the HSE's National Office for Suicide Prevention. It is based on data collected on persons presenting to hospital emergency departments (EDs) following self-harm in 2015 in the Republic of Ireland. The Registry had near complete coverage of the country's hospitals for the period 2002-2005 and, since 2006, all general hospital and paediatric hospital EDs in the Republic of Ireland have contributed data to the Registry.

From a public health perspective, the Registry fulfils a major objective in providing real-time data on trends and high risk groups for self-harm in Ireland. Information from the Registry informed core actions included in the Irish National Strategy to Reduce Suicide in Ireland, *Connecting for Life*, 2015-2020. During the implementation of the actions of *Connecting for Life*, the Registry data will guide the implementation and evaluation of actions, both at the level of the population and health services whereby the Registry forms a key component of the Strategy's Outcomes Framework to monitor progress and to examine the impact of implemented actions over the next five years.

In 2015, the Registry was recognised by the World Health Organisation (WHO) as a template for self-harm surveillance for countries at global level. In this regard, the NSRF worked closely with WHO to produce a Practice Manual for Establishing and Maintaining Surveillance Systems for Suicide Attempts and Self-Harm.

The data from the Registry provides a unique opportunity to establish trends in patterns of hospital-treated self-harm in Ireland. In this report, data on self-harm involving methods associated with increased lethality are presented, using data across the period 2007-2015. Data on high-risk suicidal behaviour arising from the 'SSIS-ACE: Psychosocial, psychiatric and work related factors associated with suicide: A case-control study' are also reported.

Main findings

In 2015, the Registry recorded 11,189 presentations to hospital due to self-harm nationally, involving 8,791 individuals. Taking the population into account, the age-standardised rate of individuals presenting to hospital following self-harm in 2015 was 204 per 100,000. Between 2011 and 2013, there were successive decreases in the self-harm rate. An essentially unchanged rate in 2015 indicates a further stabilisation of the rate of self-harm in Ireland since 2013. However, the rate in 2015 was still 9% higher than in 2007, the year before the economic recession.

In 2015, the national male rate of self-harm was 186 per 100,000, 1% higher than in 2014. The female rate of self-harm in 2015 was 222 per 100,000, 3% higher than 2014. Since 2007, the male rate has increased by 15%, whereas the female rate is 3% higher than in 2007.

Compared to 2014, the only significant change in the rate of hospital-treated self-harm by age in 2015 was among men aged 35-39 years, where the rate increased by 15% from 220 to 253 per 100,000. Rates of self-harm for other age groups remained similar to 2014 figures. The extent of self-harm among males is particularly worrying considering the higher lethality of self-harm methods among males[1] and the greater risk of suicide following self-harm among males compared to females.[2] As in previous years, the female rate was higher than the male rate but the gender difference has narrowed from 37% in 2004-2005 to 19% in 2015. The peak rate for women was in the 15-19 years age group at 718 per 100,000, whereas the peak rate among men was in 20-24 year-olds at 553 per 100,000. These rates imply that one in every 139 girls in the age group 15-19 and one in every 181 men in the age group 20-24 presented to hospital in 2015 as a consequence of self-harm.

Regional variation

There was variation in the rate of self-harm by region. The male rate varied from 77 per 100,000 for Monaghan to 434 per 100,000 for Cork City. The lowest female rate was recorded for Roscommon (133 per 100,000) with the highest rate recorded for Limerick City residents at 443 per 100,000. Relative to the national rate, a high rate of self-harm was recorded for male and female city residents and for men living in Sligo, Kerry, South Dublin and Tipperary South and for women living in South Dublin, Cavan, Meath and Carlow. In 2015, high rates for both men and women were seen in Cork City, where the male rate was 1.3 times higher than the national average and the female rate was 30% higher. In Limerick City the male and female rates were approximately twice as high as the national average.

Compared to 2014, a significant increase in the male rate of self-harm was observed in Dublin City (+15%), while significant increases in the female rate of self-harm were observed in Waterford City (+49%), Tipperary South (+47%), Donegal (+37%) and Meath (+23%). Significant decreases in the male rate of self-harm were observed in Monaghan (-44%), Limerick County (-30%), Galway County (-29%) and Mayo (-25%). The only significant decrease for women was observed in Clare (-25%).

There were 576 presentations made by residents of homeless hostels and people of no fixed abode in 2015, accounting for approximately 5% of all presentations recorded by the Registry. Since 2007, the number of presentations by residents of homeless hostels and those with no fixed abode has increased by 67%.

Repetition of self-harm

The proportion of acts accounted for by repetition in 2015 (21.4%) was similar to the years 2003-2009 (range: 20.5-23.1%) and 2013-2014 (range: 20.5-23.1%). Of the 8,791 self-harm patients treated in 2015, 1,283 (14.6%) made at least one repeat presentation to hospital during the calendar year. Therefore, repetition continues to pose a major challenge to hospital staff and family members involved. The person-based rate of repetition was similar in men and women (14.5% vs. 14.7%). Repetition varied significantly by age. Approximately 13% of self-harm patients aged less than 19 years re-presented with self-harm in 2015. The proportion who repeated was highest, at 17%, for 25-54 year-olds.

In 2015, at least five self-harm presentations were made by 126 individuals. These represented just 1% of all self-harm patients, but accounted for 9% of all self-harm presentations recorded. As in previous years, self-cutting was associated with an increased level of repetition. Almost one in five (19%) of those who used cutting as their main method of self-harm in their index act made at least one subsequent self-harm presentation in the calendar year. Risk of repetition was greatest in the days and weeks following a self-harm presentation to hospital and the risk increased markedly with each subsequent presentation.

While overall the rate of repetition in one year was similar for men and women, repetition rates by gender did vary by Local Health Office (LHO) area. The largest gender differences in the rate of repetition were observed in those LHO areas with the highest repetition rates. The female rate exceeded 240 per 100,000 for Dublin South West, Dublin West, Dublin North West and Limerick. The male rate exceeded 220 per 100,000 in Cork North Lee, Dublin South West and Dublin West. Repetition of self-harm is a strong predictor of future suicide, in particular among men, and therefore the correlation between rates of repetition and suicide rates by region warrants further investigation.

[1] Mergl, R., et al. (2015). What are reasons for the large gender differences in the lethality of suicidal acts? An epidemiological analysis in four European countries. *PLOS One*, 10(7): e0129062.

[2] Carroll, R, Metcalfe, C, Gunnell, D. (2014). Hospital presenting self-harm and risk of fatal and non-fatal repetition: systematic review and meta-analysis. *PLOS One*, 9(2): e89944.

Methods of self-harm

Intentional drug overdose was the most common method of self-harm, involved in 65% of all acts registered in 2015. Minor tranquillisers, paracetamol-containing medicines and anti-depressants/mood stabilisers were involved in 38%, 29% and 20% of drug overdose acts, respectively. In 2015, the number of self-harm presentations to hospital involving street drugs increased by 18% from 2014 (following an increase in 2014 by 11%) to 547, which is higher than the level recorded in 2008 (n=462). Drug misuse is an important characteristic of completed suicides[3,4] and research should examine the sources of illicit drugs used in intentional overdose.

Attempted hanging was involved in 7% of all self-harm presentations (11% for men and 4% for women). At 790, the number of presentations involving attempted hanging was only marginally higher (+1%) than 2014 (+2% for men and -2% for women). However, between 2007 and 2015, the proportion of self-harm presentations involving hanging increased by 78%. Increasing trends in highly lethal self-harm methods are associated with higher suicidal intent[5,6] and with higher risk of subsequent suicide.[7] Since 2007, the use of such methods has increased – with the male rate increasing by 47% and the female rate by 55%. This increase was most pronounced during the period 2007-2010.

Cutting was the only other common method of self-harm, involved in 27% of all episodes. Cutting was significantly more common in men (29%) than in women (25%), which is in contrast with the gender pattern related to self-cutting in other countries. Under one-third (28%) received steristrips or steribonds, 51% did not require any treatment, 18% required sutures while 3% were referred for plastic surgery. Men who cut themselves more often required intensive medical treatment, which reflects greater severity of self-cutting in males compared with females.

Alcohol was involved in just over one third of all cases (31%), a slight decrease from 2014. Alcohol was significantly more often involved in male episodes of self-harm than female episodes (34% vs 29%). Alcohol may be one of the factors underlying the pattern of presentations with self-harm by time of day and day of week. Presentations peaked in the hours around midnight and almost one-third of all presentations occurred on Sundays and Mondays.

Initial findings from the SSIS-ACE study including a sample of 220 patients with high-risk suicidal behaviour (HRSB). Criteria for HRSB were defined as a combination of highly lethal methods of self-harm and clinical impression of high suicide intent. The majority of participants were male, with a peak in those aged 30-35 years. Half of the sample had taken a drug overdose, with other common methods of self-harm including hanging and highly lethal self-cutting. Despite having engaged in HRSB, only 3% were regarded as having high suicidal intent.

Clinical management of self-harm

In 2015, 73% (n=7,730) of patients were assessed by a member of the mental health team in the hospital. This is an increase from 67% in 2014. Assessment was most common following attempted drowning (81%) and attempted hanging (83%). Overall, 80% of those not admitted to the presenting hospital received a psychiatric assessment prior to discharge. However, only 14% of patients who left before recommendation/ against medical advice received an assessment.

Overall, in 13% of 2015 cases, the patient left the ED before a next care recommendation could be made. Following their treatment in the ED, inpatient admission was the next stage of care recommended for 31% of cases (general or psychiatric admission). Most commonly, 55% of cases were discharged following treatment in the ED. Next care varied significantly by HSE hospital group. The observed variation in recommended next care is likely to be due to variation in the availability of resources and services but it also suggests that assessment and management procedures with respect to self-harm patients are likely to be variable and inconsistent across the country.

In 2015, three-quarters (75%) of patients discharged from the presenting ED were provided with a referral. In 32% of episodes, an out-patient appointment was recommended as a next care step for the patient. Recommendations to attend their GP for a follow-up appointment were given to 17% of discharged patients. Of those not admitted to the presenting hospital, one in ten were transferred to another hospital for treatment. Other services (e.g. psychological services, community-based mental health teams and addiction services) were recommended in 15% of episodes.

[3] Galway, K., et al. (2016). Substance misuse in life and death in a 2-year cohort of suicides. *British Journal of Psychiatry*, 208(3): 292-7.

[4] Arensman, E., et al. (2013). Second Report of the Suicide Support and Information System. Cork: National Suicide Research Foundation.

[5] Bergen, H., et al. (2012). How do methods of non-fatal self-harm relate to eventual suicide? *Journal of Affective Disorders*, 136: 26-33.

[6] Beautrais, A. (2001). Suicides and serious suicide attempts: two populations or one? *Psychological Medicine*. 31(5): 837-45.

[7] Runeson, B., et al. (2010). Method of attempted suicide as predictor of subsequent successful suicide: national long term cohort study. *BMJ*, 13(341): c3222.

"This report highlights key priorities, in line with the actions from *Connecting for Life*."

Recommendations

Following successive increases in self-harm in Ireland during the period 2007-2010, the 2015 Annual Report of the National Self-Harm Registry Ireland shows a further stabilisation of the Irish self-harm rate. However, the 2015 national self-harm rate is still 9% higher than the national rate in 2007, and the national male self-harm rate is still 15% higher than the equivalent rate in 2007. The 2015 Registry outcomes underline an on-going need for prevention and intervention programmes to be implemented at national level. Increased and continued support should be provided for evidence-based and best practice prevention and mental health promotion programmes in line with relevant strategic goals and actions in *Connecting for Life*. These goals and specific objectives are highlighted, where relevant.

A number of the recommendations following from the 2015 report findings are consistent with those proposed in recent years, and a number of key outcomes indicate on-going priorities.

Assessment of self-harm

The Registry consistently provides evidence for different types of self-harm patients presenting to EDs, such as those engaging in highly lethal acts of self-harm with high risk of subsequent suicide and those using methods with low lethality but who may be at risk of non-fatal repetition. While it is strongly recommended that all self-harm patients presenting to the ED should receive a comprehensive risk and psychosocial-psychiatric assessment, recommended treatment should be tailored according to the patient's needs and risk of subsequent suicidal behaviour.[8] This links in directly with **Goal 4** of *Connecting for Life*.

In this context, it is encouraging that as part of the National Clinical Care Programme for Mental Health (NCCP-MH), at least 34 self-harm specialist nurses have taken up their position in different hospitals in the country since the start of 2015. It is also encouraging to see that among those cases where this information was available, almost three-quarters of patients were assessed in the ED following a presentation of self-harm. Enhancing assessment and management of self-harm in hospital EDs should be ongoing priorities. The Health Research Board (HRB) have awarded the NSRF's application for a five-year research programme, which aims to enhance psychosocial and psychiatric assessment of patients presenting to hospital following self-harm.

Objective 4.1:
Improve psychosocial and psychiatric assessment and care pathways for people vulnerable to suicidal behaviour.

Objective 4.2:
Improve access to effective therapeutic interventions (e.g. counselling, Dialectical Behaviour Therapy, Cognitive Behaviour Therapy) for people vulnerable to suicidal behaviour.

General population awareness

Considering that in 2015 the rate of self-harm was still 9% higher than in 2007, before the economic recession, this underlines the need for continued implementation and evaluation of programmes to increase awareness of mental health issues among the general public and professionals – in particular those involved in supporting people who are unemployed and those experiencing financial difficulties. This is particularly true for young and middle aged men in Ireland, who showed a significant increase in both self-harm and suicide during the economic recession.[9] There is growing evidence for the effectiveness of multi-level community based self-harm and suicide prevention programmes in addressing self-harm risk among people who face socio-economic

[8] National Institute for Health and Care Excellence (2004). *Self-harm: The short-term physical and psychological management and secondary prevention of self-harm in primary and secondary care.* London: NICE.

[9] Corcoran, P., et al. (2015). Impact of the economic recession and subsequent austerity on suicide and self-harm in Ireland: an interrupted time series analysis. *International Journal of Epidemiology*. 44(3): 969-77.

challenges and who are vulnerable in terms of varying mental health issues.[10, 11, 12] With regard to further research into the interaction between mental health difficulties and work related risk factors associated with self-harm and suicide, the NSRF is completing a three-year, Health Research Board funded, study (SSIS-ACE), conducted in collaboration with the Departments of Epidemiology and Public Health and of General Practice in UCC. This links in with **Goals 1** and **2** of *Connecting for Life*, specifically to:

Objective 1.1:
Improve population-wide understanding of suicidal behaviour, mental health and wellbeing, and associated risk and protective factors.

Objective 2.1:
Improve the continuation of community level responses to suicide through planned, multi-agency approaches.

The significant increase of self-harm among men aged 30-39 years underlines the need to reduce stigma related to mental health and help-seeking behaviour. At the same time, further research is required to examine the effectiveness of interventions, such as Cognitive Behaviour Therapy for self-harm in males while so far the positive effects of treatment studies are based on females.

Access to medication

The Registry recorded an increase in the use of street drugs in drug overdose acts in 2015 by 18%, involving substances such as cannabis, ecstasy and heroin. This figure is the second highest recorded by the Registry (n=547). Considering that since the start of the Registry in 2003, minor tranquillisers have been the most frequently used type of drug involved in intentional overdoses, reducing access to minor tranquillisers and other frequently used drugs should be an ongoing priority in line with **Goal 6** of the *Connecting for Life* strategy. This will be addressed by a Task Force to reduce access frequently used drugs involving the National Suicide Research Foundation, the National Office for Suicide Prevention, the HRB National Drug-Related Deaths Index and other stakeholders.

Objective 6.1:
Reduce access to frequently used drugs in intentional drug overdose.

High-risk groups

The increase in self-harm acts involving attempted hanging in 2015 underline the importance of suicide risk assessment combined with psychiatric and psychosocial assessment considering the high risk of subsequent suicide. In line with previous research[13, 14] more innovative and intensified efforts should be made to reduce self-harm and suicide by hanging. Initial findings from the SSIS-ACE on high-risk suicidal behaviour are presented in Section 3. This study is one of the first to examine suicidal intent in hospital-treated self-harm in Ireland. Overall, men were more likely to engage in such self-harm, which is in contrast to overall patterns of self-harm. Drug overdose accounted for more than half of all presentations, which supports the idea that methods of self-harm are associated with a range of motives. The low scores reported in the Beck's objective suicide intent scale have important implications for the assessment of suicide intent in clinical settings. This further highlights the need for a combined clinical and empirical approach to such presentations, linking in with **Goal 6** of the *Connecting for Life* strategy:

Objective 6.2:
Reduce access to highly lethal methods used in suicidal behaviour.

While representing a small proportion of overall presentations, a total of 576 presentations were made by people of no fixed abode or residents of homeless hostels. The homeless are a particularly vulnerable population, at high risk of repetition and mortality from all causes.[15] Further work to explore the specific challenges of treating self-harm among the homeless is required, and targeted interventions for such a population are necessary, as addressed by **Goal 3** of the *Connecting for Life* strategy:

Objective 3.1:
Improve the implementation of effective approaches to reducing suicidal behaviour among priority groups.

Alcohol and self-harm

In line with previous years, misuse or abuse of alcohol is one of the factors associated with the higher rate of self-harm presentations on Sundays, Mondays and public holidays, around the hours of midnight. These findings underline the need for continued efforts to enhance health service capacity at specific time and to intensify national strategies to increase awareness of the risks involved in the use and misuse of alcohol, starting at pre-adolescent age and intensify national strategies to reduce access to alcohol and drugs. The actions of the Substance Misuse Strategy are supported by *Connecting for Life's* **Goal 3**:

[10] Hegerl, U., et al. (2013). Alliances against depression – a community based approach to target depression and to prevent suicidal behaviour. *Neuroscience and Biobehavioural Reviews*. 37(10): 2404-9.

[11] Szekely, A., et al (2013) How to decrease suicide rates in both genders? An effectiveness study of a community-based intervention (EAAD). *PLOS One*, 8(9): e75081.

[12] Zalsman, G., et al. (2016). Suicide prevention strategies revisited: 10-year systematic review. *Lancet Psychiatry*. 3(7): 646-59.

[13] Mergl, R., et al. (2015). What are reasons for the large gender differences in the lethality of suicidal acts? An epidemiological analysis in four European countries. *PLOS One*. 10(7): e0129062.

[14] Gunnell, D., et al. (2005). The epidemiology and prevention of suicide by hanging: a systematic review. *International Journal of Epidemiology*. 34(2): 433-42.

[15] Haw, C., et al. (2006). Deliberate self-harm patients of no fixed abode: A study of characteristics and subsequent deaths in patients presenting to a general hospital. *Social Psychiatry and Psychiatric Epidemiology*. 41: 918-25.

Objective 3.2:
Support, in relation to suicide prevention, the Substance Misuse Strategy to address the high rate of alcohol and drug misuse.

Self-harm patients who have consumed alcohol are at an increased risk of leaving with ED without being seen. Such complex presentations indicate the need for active consultation and collaboration between the mental health services and addiction treatment services for patients who present with dual diagnosis (psychiatric disorder and alcohol/drug abuse).

Reducing rates of repetition

The current report shows ongoing evidence that self-cutting is the method most strongly associated with high risk of repeated self-harm following a presentation to an ED.[16] The Registry further illustrates the 'dose-response relationship' between the number of self-harm presentations and risk of repetition.[17] There is need for continued efforts to prioritise national implementation of evidence-based treatments shown to reduce risk of repetition, such as cognitive behavioural and dialectical behavioural interventions.[18,19] The National Office for Suicide Prevention has funded the national implementation of dialectical behaviour therapy for people diagnosed with Borderline Personality Disorder, which is guided by the proportion of frequently repeating self-harm patients presenting to hospitals in Ireland. This represents further evidence supporting the need to prioritise the implementation of the *Connecting for Life* objectives 4.1 and 4.2 as mentioned above.

Standardising next care

In line with previous years, there was considerable variation in the next care recommended to self-harm patients, and the proportion of patients who left hospital before a recommendation. While the Registry recorded that in 2015 nearly three-quarters of patients discharged from the ED following a self-harm presentation were provided with a referral, variations in the referral pathway for patients was seen according to HSE hospital group. A subgroup of the National Mental Health Clinical Programme Steering Group produced *National Guidelines for the Assessment and Management of Patients presenting to Irish Emergency Departments* following self-harm. It is recommended that these guidelines be implemented nationally as a matter of priority. In addition, suicide and self-harm awareness training for self-harm nurses is being implemented on an ongoing basis, via a train-the-trainer approach, in line with **Goal 5** of *Connecting for Life*:

Objective 5.4:
Ensure best practice among health and social care practitioners through (a) the implementation of clinical guidelines on self-harm and (b) the delivery of accredited education programmes on suicide prevention.

Benefits, research and innovation

The main benefits of the Registry are to detect trends and patterns of suicidal behaviour in Ireland. An added value of such information is its use in monitoring and evaluating the actions from the *Connecting for Life* strategy. On-going work is being undertaken by the NSRF to link the Registry data with suicide mortality data obtained through the Suicide Support and Information System in Cork and the Central Statistics Office data. Linking the Registry self-harm data with the SSIS suicide mortality data revealed that self-harm patients were over 42 times more likely to die by suicide than persons in the general population. Evidence of the association between self-harm and suicide is further supported by recent UK-based research showing a significant association between self-harm involving self-cutting and suicide among both adults and young people.[20,21] In addition, there are indications that increasing rates of self-harm in men are likely to be followed or paralleled by increasing suicide rates. It is therefore recommended that self-harm data be linked with suicide mortality data at a national level in order to enhance insight into predictors of suicide risk.

Objective 7.2:
Improve access to timely and high quality data on suicide and self-harm.

[16] Arensman, E., et al. (2013). Factors associated with self-cutting as a method of self-harm: Findings from the Irish National Registry of Deliberate Self-Harm. *European Journal of Public Health*. 24(2): 292-7.

[17] Perry, I.J., et al. (2012). The incidence and repetition of hospital-treated deliberate self harm: Findings from the world's first national registry. *PLOS One*, 7(2): e31663.

[18] Daigle, M.S., et al. (2011). Suicide attempts: prevention of repetition. *The Canadian Journal of Psychiatry*. 56(10): 621-9.

[19] Binks, C.A., et al. (2006). Psychological therapies for people with borderline personality disorder (Review). *Cochrane Database of Systematic Reviews*, 25(1): CD005652.

[20] Bergen, H., et al. (2012). Premature death after self-harm: a multicentre cohort study. *The Lancet*. 380: 1568-74.

[21] Hawton, K., et al. (2012). Self-harm and suicide in adolescents. *The Lancet*. 379: 2373–82.

Eve Griffin
Manager, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

Ella Arensman
Director of Research, National Suicide Research Foundation, Cork
Research Professor, Department of Epidemiology and Public Health, University College Cork

Christina B Dillon
Data Manager, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

Paul Corcoran
Senior Lecturer, Department of Epidemiology and Public Health and Department of Obstetrics and Gynaecology, University College Cork

Eileen Williamson
Executive Director, National Suicide Research Foundation, Cork

Ivan J Perry
Professor of Epidemiology and Public Health, University College Cork
Director, National Self-Harm Registry Ireland, National Suicide Research Foundation, Cork

Contribution of the Registry

Contribution of the Registry to implementation and evaluation of self-harm intervention and prevention programmes in Ireland

Information from the Registry on self-harm trends, demographic and clinical characteristics, has guided the development and implementation of recommendations and specific interventions, such as:

1. The evidence base for the National Strategy to Reduce Suicide in Ireland, *Connecting for Life*, 2015-2020. Registry data will form a key component of the Strategy's Outcomes Framework to monitor progress and to examine the impact of implemented actions.

2. In 2015, the National Self-Harm Registry Ireland was recognised by the World Health Organisation as a template for self-harm surveillance for countries at global level. In this regard, the NSRF worked closely with WHO to produce a Practice Manual for Establishing and Maintaining Surveillance Systems for Suicide Attempts and Self-Harm (WHO, 2016).

3. The findings from the Registry have provided an informed basis for a successful five-year programme, funded by the Health Research Board, *Individual and area level determinants of self-harm and suicide in Ireland: Enhancing prediction, risk assessment and management of self-harm by health services.* This research programme aims to improve care for people who engage in self-harm, and to reduce repeated self-harm and suicide.

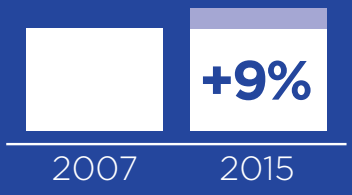
4. The implementation of Dialectical Behaviour Therapy (DBT) at a national level - The National DBT Project, Ireland was established in 2013 to facilitate the formation of DBT teams within Community Mental Health Teams. To date, 23 teams (13 adult and 10 child/adolescent) have received training and have subsequently implemented DBT in their services. Adapted versions of DBT, which target emotional dysregulation and less frequent self harm among other client groups, are now also being considered for implementation.

5. Implementation of guidelines for assessment and management of self-harm patients presenting to Irish Emergency Departments (2014-2015) – The Registry data underlined the need to implement uniform evidence based guidelines for the assessment and management of self-harm patients presenting to EDs.

2015 statistics at a glance

Presentations
11,189

Persons
8,791



Rate in 2015
9% higher than 2007

RATES:

204
per 100,000

1 in every 490
had a self-harm act

Male: 20-24 year-olds
(553 per 100,000)
1 in every 181

Female: 15-19 year-olds
(718 per 100,000)
1 in every 139

PEAK RATES WERE AMONG YOUNG PEOPLE

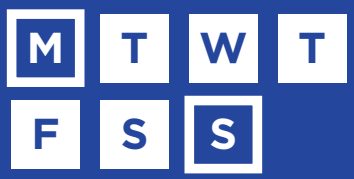
TIME:

Peak time

Women 9pm

Men 10pm

Almost **half** of presentations were made between 7pm-3am

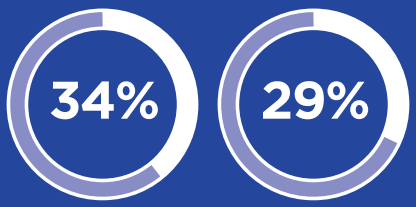


Mondays and **Sundays** had the highest number of self-harm presentations

METHOD:

2 in every 3
involved **overdose**

1 in every 3
involved **alcohol**



Men **Women**

One-quarter
involved **self-cutting**

TREATMENT:

73%
received an assessment in the ED

75% received a follow-up recommendation after discharge

13%
left the ED without being seen

GEOGRAPHY:

263 per 100,000

143 per 100,000

Urban **Rural**

Higher incidence of self-harm in urban areas

Preventing suicide and self-harm: What works?

This year, two major reviews have been published which synthesise the evidence around suicide prevention. The first, Zalsman et al (2016), reviews the evidence for suicide prevention initiatives from the past ten years. The second, Hawton et al (2016) reviews the effectiveness of psychosocial assessment for adults who have engaged in self-harm.

Suicide prevention strategies revisited: 10-year systematic review.

Background

As many countries are developing suicide prevention strategies, up-to-date, high-quality evidence is required. The purpose of this review was to summarise the evidence for the effectiveness of suicide prevention initiatives since 2005.

Methods

The authors searched for studies pertaining to suicide prevention published between January 2005 and December 2014. Seven interventions were assessed: public and physician education, media strategies, screening, restricting access to suicide means, treatments, and internet or hotline support. Data were extracted on primary outcomes of interest, namely suicidal behaviour (suicide, attempt, or ideation), and intermediate or secondary outcomes (treatment-seeking, identification of at-risk individuals, antidepressant prescription or use rates, or referrals). Suicide prevention experts from 13 European countries reviewed all articles and rated the strength of evidence using standardised criteria.

Findings

A total of 164 studies were included in the final review. The outcomes from these studies strengthen the evidence base in several areas of suicide prevention:

- Restricting access to lethal means can clearly prevent suicide.
- There have been significant results of school-based awareness programmes in reducing suicide attempts and ideation.
- The anti-suicidal effects of clozapine and lithium have been confirmed but may be less specific than previously thought.
- Effective pharmacological and psychological treatments of depression are important in prevention as well as education of physicians.
- There is insufficient evidence regarding possible benefits for suicide prevention of screening primary care, in public education, and in media guidelines.

Conclusions and implications

Implementation of these evidence-supported methods has the potential to change public health strategies in suicide prevention plans, and significantly reduce the number of deaths due to suicide.

More research using randomised control trials (RCTs) designed with standardised outcome measures and qualitative methods when applicable is needed to investigate public health approaches such as gatekeeper training, media regulation, internet-based intervention, and helplines, as well as in the two health-care approaches of physician education and screening in primary care.

Source: Gil Zalsman, Keith Hawton, Danuta Wasserman, Kees van Heeringen, Ella Arensman, Marco Sarchiapone, Vladimir Carli, Cyril Höschl, Ran Barzilay, Judit Balazs, György Purebl, Jean Pierre Kahn, Pilar Alejandra Sáiz, Cendrine Bursztein Lipsicas, Julio Bobes, Doina Cozman, Ulrich Hegerl, Joseph Zoha. Lancet Psychiatry (2016), http://dx.doi.org/10.1016/S2215-0366(16)30030-X

Psychosocial interventions following self-harm in adults: a systematic review and meta-analysis.

Background

Self-harm is common, particularly in young adults. Self-harm is often repeated and is strongly associated with suicide. Effective aftercare of individuals who self-harm is therefore important. The aim of this study was to review the evidence for the effectiveness of psychosocial interventions for self-harm in adults.

Methods

The authors searched for RCTs of psychosocial interventions published between January 1998 and April 2015. Results were reported for interventions with at least three randomised controlled groups. The primary outcome was repetition of self-harm at the conclusion of treatment and at follow-up at 6, 12, and 24 months.

Findings

A total of 29 trials were included, comprising of cognitive behavioural-based psychotherapy (CBT), dialectical behaviour therapy (DBT), case management, and sending postcards to participants.

- CBT was associated with fewer participants repeating self-harm at follow-up.
- Patients receiving DBT had fewer repeat self-harm episodes post-intervention, although there was no significant effect on the proportion of patients repeating.
- Case management and sending regular postcards did not reduce repetition.
- The evidence suggested a possible publication bias for CBT. Trial numbers were insufficient to test this bias in relation to the other interventions investigated.
- Quality of the evidence was in general moderate to very low, with biases most apparent for the domains of participant and clinical personnel blinding.

Conclusions and implications

Evidence seems to be sufficient to conclude that CBT is an effective intervention among adult patients following self-harm. Although this intervention might not be suitable for all patients who self-harm, the study recommends that it should be available in services for this patient population. DBT can reduce the frequency of repeat self-harm in patients with borderline personality disorder. Sending regular postcards might not reduce the proportion of patients repeating self-harm; however, it might hold promise in settings where community psychiatric services are limited.

Source: Keith Hawton, Katrina G Witt, Tatiana L Taylor Salisbury, Ella Arensman, David Gunnell, Philip Hazell, Ellen Townsend, Kees van Heeringen. Lancet Psychiatry (2016), http://dx.doi.org/10.1016/S2215-0366(16)30070-0

"...ongoing surveillance of self-harm as recommended by the WHO..."

Methods

Background

The National Suicide Research Foundation was founded in January 1995 by the late Dr Michael J Kelleher and currently operates under the Medical Directorship of Dr Margaret Kelleher, the Research Directorship of Professor Ella Arensman and Professor Ivan J Perry as Director of the National Self-Harm Registry Ireland. Ms Eileen Williamson is the Executive Director.

Funding statement

The National Self-Harm Registry Ireland is a national system of population monitoring for the occurrence of hospital-treated self-harm. It was established, at the request of the Department of Health and Children, by the National Suicide Research Foundation and is funded by the Health Service Executive's National Office for Suicide Prevention. This report has been commissioned by the National Office for Suicide Prevention.

Definition and terminology

The Registry uses the following as its definition of self-harm: 'an act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour, that without intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences'. This definition was developed by the WHO/Euro Multicentre Study Working Group and was associated with the term 'parasuicide'. Internationally, the term parasuicide has been superseded by the term 'deliberate self-harm' and consequently, the Registry has adopted the term 'self-harm'. The definition includes acts involving varying levels of suicidal intent and various underlying motives such as loss of control, cry for help or self-punishment.

Inclusion criteria

- All methods of self-harm are included i.e., drug overdoses, alcohol overdoses, lacerations, attempted drownings, attempted hangings, gunshot wounds, etc. where it is clear that the self-harm was intentionally inflicted.
- All individuals who are alive on admission to hospital following a self-harm act are included.

Exclusion criteria

The following cases are NOT considered to be self-harm:

- Accidental overdoses e.g., an individual who takes additional medication in the case of illness, without any intention to self-harm.
- Alcohol overdoses alone where the intention was not to self-harm.
- Accidental overdoses of street drugs i.e., drugs used for recreational purposes, without the intention to self-harm.
- Individuals who are dead on arrival at hospital as a result of suicide.

Quality control

The validity of the Registry findings is dependent on the standardised application of the case-definition and inclusion/exclusion criteria. The Registry has undertaken a cross-checking exercise in which pairs of data registration officers independently collected data from two hospitals for the same consecutive series of attendances to the emergency department. Results indicated that there is a very high level of agreement between the data registration officers. Furthermore, the data are continuously checked for consistency and accuracy.

Data recording

Since 2006, the Registry has recorded its data onto encrypted laptop computers and transferred the data electronically to the offices of the National Suicide Research Foundation. Data for all self-harm presentations made in 2015 were recorded using this electronic system.

Data items

A minimal dataset has been developed to determine the extent of self-harm, the circumstances relating to both the act and the individual and to examine trends by area. While the data items below will enable the system to avoid duplicate recording and to recognise repeat acts of self-harm by the same individual, they ensure that it is impossible to identify an individual on the basis of the data recorded.

Initials

Initial letters from an individual self-harm patient's name are recorded in an encrypted form by the Registry data entry system for the purposes of avoiding duplication, ensuring that repeat episodes are recognised and calculating incidence rates based on persons rather than events.

Gender

Male or female gender is recorded when known.

Date of birth

Date of birth is recorded in an encoded format to further protect the identity of the individual. As well as being used to identify repeat self-harm presentations by the same individual, date of birth is used to calculate age.

Area of residence

Patient addresses are coded to the appropriate electoral division and small area code where applicable.

Date and hour of attendance at hospital

Brought to hospital by ambulance

Method(s) of self-harm

The method(s) of self-harm are recorded according to the Tenth Revision of the WHO's International Classification of Diseases codes for intentional injury (X60-X84). The main methods are overdose of drugs and medicaments (X60-X64), self-poisonings by alcohol (X65), poisonings which involve the ingestion of chemicals, noxious substances, gases and vapours (X66-X69) and self-harm by hanging (X70), by drowning (X71) and by sharp object (X78). Some individuals may use a combination of methods e.g., overdose of medications and self-cutting. In this report, results generally relate to the 'main method' of self-harm. In keeping with standards recommended by the WHO/Euro Study on Suicidal Behaviour, this is taken as the most lethal method employed. For acts involving self-cutting, the treatment received was recorded when known.

Drugs taken

Where applicable, the name and quantity of the drugs taken are recorded.

Medical card status

Whether the individual presenting has a medical card or not is recorded.

Mental health assessment

Whether the individual presenting had a review or assessment by the psychiatric team in the presenting hospital emergency department is recorded.

Recommended next care

Recommended next care following treatment in the hospital emergency department is recorded.

Confidentiality

Confidentiality is strictly maintained. The National Suicide Research Foundation is registered with the Data Protection Agency and complies with the Irish Data Protection Act of 1988 and the Irish Data Protection (Amendment) Act of 2003. Only anonymised data are released in aggregate form in reports. The names and addresses of patients are not recorded.

Ethical approval

Ethical approval has been granted by the National Research Ethics Committee of the Faculty of Public Health Medicine. The Registry has also received ethical approval from the relevant hospitals and Health Service Executive (HSE) ethics committees.

Registry coverage

In 2015, self-harm data were collected from each HSE region in the Republic of Ireland (pop: 4,635,500): the HSE Dublin/ Mid-Leinster Region (pop: 1,357,205), HSE Dublin/ North East Region (pop: 1,027,120), HSE

South Region (pop: 1,176,100), and HSE West Region (pop: 1,062,350).

There was complete coverage of all acute hospitals in the Republic of Ireland.

There was complete coverage of all acute hospitals in the Ireland East Hospital Group – Mater Misercordiae University Hospital, Midland Regional Hospital, Mullingar, Our Lady's Hospital Navan, St. Columcille's Hospital, Loughlinstown, St. Luke's Hospital, Kilkenny, St. Michael's Hospital, Dun Laoghaire, Wexford General Hospital and another hospital whose ethics committee stipulated that it should not be named in Registry reports.

There was complete coverage of all acute hospitals in the Dublin Midlands Hospital Group – Midland Regional Hospital, Portlaoise, Midland Regional Hospital, Tullamore, Naas General Hospital, St. James's Hospital and Adelaide and Meath Hospital Tallaght Hospital (adults).

There was complete coverage of all acute hospitals in the RCSI Hospital Group – Beaumont Hospital, Cavan General Hospital, Connolly Hospital, Blanchardstown and Our Lady of Lourdes Hospital, Drogheda.

There was complete coverage of all acute hospitals in the South/ South West Hospital Group – Bantry General Hospital, Cork University Hospital, University Hospital, Kerry, Mallow General Hospital, Mercy University Hospital, Cork, South Tipperary General Hospital and University Hospital, Waterford.

There was complete coverage of all acute hospitals in the University of Limerick Hospital Group – Ennis Hospital, Nenagh Hospital, St. John's Hospital, Limerick and University Hospital, Limerick.

There was complete coverage of all acute hospitals in the Saolta University Health Care Group – Galway University Hospital, Letterkenny General Hospital, Mayo General Hospital, Portiuncula Hospital, Ballinasloe and Sligo Regional Hospital.

There was complete coverage of all hospitals in the Children's Hospital Group – Children's University Hospital at Temple Street, National Children's Hospital at Tallaght Hospital and Our Lady's Children's Hospital, Crumlin.

In total, self-harm data were collected for the full calendar year of 2015 for all 36 acute hospitals that operated in Ireland during this year. As mentioned previously, since 2006 the Registry has had complete coverage of all acute hospitals in Ireland.

In 2013, a number of hospital emergency departments were re-designated as Model 2 status hospitals as part of the HSE's *Securing the Future of Smaller Hospitals* framework, with some of these hospitals closing their emergency department and others operating on reduced hours. The hospitals which continue to have emergency departments on reduced hours include: Bantry General Hospital, Ennis Hospital, Mallow General Hospital, Nenagh Hospital, St. Columcille's Hospital Loughlinstown and St. John's Hospital Limerick. Data from these hospitals continue to be recorded by the Registry for 2015.

Population data

For 2015, the Central Statistics Office population estimates were utilised. These estimates provide age-sex-specific population data for the country and its constituent regional authority areas. Proportional differences between the 2015 regional authority population estimates and the equivalent National Census 2011 figures were calculated and applied to the National Census 2011 population figures for Irish cities, counties and HSE region figures in order to derive population estimates for 2015. For urban and rural district populations and HSE Local Health Office areas, National Census 2011 population data were utilised.

Calculation of rates

Self-harm rates were calculated based on the number of persons resident in the relevant area who engaged in self-harm irrespective of whether they were treated in that area or elsewhere. Crude and age-specific rates per 100,000 population were calculated by dividing the number of persons who engaged in self-harm (n) by the relevant population figure (p) and multiplying the result by 100,000, i.e. (n/p) * 100,000.

European age-standardised rates (EASRs) are the incidence rates that would be observed if the population under study had the same age composition as a theoretical European population. Adjusting for the age composition of the population under study ensures that differences observed by gender or by area are due to differences in the incidence of self-harm rather than differences in the composition of the populations. EASRs were calculated as follows: for each five-year age group, the number of persons who engaged in self-harm was divided by the population at risk and then multiplied by the number in the European standard population. The EASR is the sum of these age-specific figures.

A note on small numbers

Calculated rates that are based on less than 20 events may be an unreliable measure of the underlying rate. In addition, self-harm events may not be independent of one another, although these assumptions are used in the calculation of confidence intervals, in the absence of any clear knowledge of the relationship between these events.

The Registry recorded 2 cases of self-harm for which patient initials, gender or date of birth were unknown. These 2 cases have been excluded from the findings reported here. In addition, a small number of self-harm patients presented to hospital more than once on the same calendar day. This happened for a variety of reasons including being transferred to another hospital, absconding and returning, etc. These patients were considered as receiving one episode of care and were recorded once in the finalised Registry database for 2015.

A note on confidence intervals

Confidence intervals provide us with a margin of error within which underlying rates may be presumed to fall on the basis of observed data. Confidence intervals assume that the event rate (n/p) is small and that the events are independent of one another. A 95% confidence interval for the number of events (n), is $n +/- 2\sqrt{n}$. For example, if 25 self-harm presentations are observed in a specific region in one year, then the 95% confidence interval will be $25 +/- 2\sqrt{25}$ or 15 to 35. Thus, the 95% confidence interval around a rate ranges from $(n - 2\sqrt{n}) / p$ to $(n + 2\sqrt{n}) / p$, where p is the population at risk. If the rate is expressed per 100,000 population, then these quantities must be multiplied by 100,000.

A 95% confidence interval may be calculated to establish whether the two rates differ statistically significantly. The difference between the rates is calculated. The 95% confidence interval for this rate difference (rd) ranges from $rd - 2\sqrt{(n1 / p12 + n2 / p22)}$ to $rd + 2\sqrt{(n1 / p12 + n2 / p22)}$. If the rates were expressed per 100,000 population, then $2\sqrt{(n1 / p12 + n2 / p22)}$ must be multiplied by 100,000 before being added to and subtracted from the rate difference. If zero is outside of the range of the 95% confidence interval, then the difference between the rates is statistically significant.

Mapping of self-harm data

Rates of self-harm by gender and repetition rates according to Local Health Office (LHO) are illustrated in the report using maps. QGIS, version 2.14, was used to generate the maps (www.qgis.org).

Acknowledgements

The following is the team of people who collected the data that formed the basis of this Annual Report. Their efforts are greatly appreciated.

HSE Dublin/Midlands Region

Liisa Aula
James Buckley
Sarah MacMahon
Edel McCarra
Diarmuid O'Connor
Laura Shehan

HSE Dublin/North East Region

Agnieszka Biedrycka
Alan Boon
Grace Boon
Christine Clarke
Rita Cullivan
Adrienne Timmins

HSE South Region

Ursula Burke
Tricia Shannon
Karen Twomey
Una Walsh

HSE West Region

Ailish Melia
Catherine Murphy
Mary Nix
Eileen Quinn

Sean Cronin, Millennium Software: Database development

Tiernan Hourihan, NSRF: Technical support

Alan O'Shea, aosdesign: Graphic design

Research findings related to HRSB were provided by Jacklyn McCarthy, Researcher, SSIS-ACE/ Hospital Liaison Manager Self-Harm

We would like to acknowledge the assistance of staff of the Department of Health, the HSE National Office for Suicide Prevention, the respective HSE regions and the individual hospitals that have facilitated the work of the Registry.

We would also like to acknowledge receipt of a grant from ESB ElectricAID in December 2010 which enabled the upgrading of the IT equipment used for the operation of the Registry.

"There were 11,189 presentations of self-harm in 2015."

SECTION I:

Hospital Presentations

For the period from 1 January to 31 December 2015, the Registry recorded 11,189 self-harm presentations to hospital that were made by 8,791 individuals. Thus, the number of self-harm presentations and the number of persons involved were similar to those recorded in 2014. Table 1 summarises the changes in the number of presentations and persons since the Registry reached near national coverage in 2002.

	PRESENTATIONS		PERSONS	
YEAR	Number	% difference	Number	% difference
2002	10,537	-	8,421	-
2003	11,204	+6%	8,805	+5%
2004	11,092	-1%	8,610	-2%
2005	10,789	-3%	8,594	-<1%
2006	10,688	-1%	8,218	-4%
2007	11,084	+4%	8,598	+5%
2008	11,700	+6%	9,218	+7%
2009	11,966	+2%	9,493	+3%
2010	12,337	+3%	9,887	+4%
2011	12,216	-1%	9,834	-<1%
2012	12,010	-2%	9,483	-4%
2013	11,061	-8%	8,772	-8%
2014	11,126	+<1%	8,708	-<1%
2015	11,189	+1%	8,791	+1%

Table 1: Number of self-harm presentations and persons who presented in the Republic of Ireland in 2002-2015 (2002-2005 figures extrapolated to adjust for hospitals not contributing data).

The age-standardised rate of individuals presenting to hospital in the Republic of Ireland following self-harm in 2015 was 204 (95% Confidence Interval (CI): 199 to 208) per 100,000. Thus, the rate in 2015 was essentially unchanged from 2014 (200 per 100,000). In recent years there were successive decreases in the self-harm rate between 2011 and 2013, and an essentially unchanged rate between 2013 and 2014. The incidence of self-harm in Ireland is examined in detail in Section II of the Annual Report.

The numbers of self-harm episodes treated in the Republic of Ireland by HSE region, hospital group, age and gender are given in Appendix 1. Of the recorded presentations in 2015, 45% were made by men and 55% were made by women. Self-harm episodes were generally confined to the younger age groups. Just under half of all presentations (47%) were by people under 30 years of age and 85% of presentations were by people aged less than 50 years.

In most age groups the number of self-harm acts by women exceeded the number by men. This was most pronounced in the 10-14 year age group where there were four times as many female presentations. The number of self-harm presentations made by men was slightly higher than the number made by women (8%) in the 25-39 year age group.

In line with 2014, 576 (5.1%) of all self-harm presentations were by residents of homeless hostels and people of no fixed abode and 46 (0.4%) were made by hospital inpatients.

Self-harm by HSE Hospital Group

Based on provisional figures acquired from the HSE Business Intelligence Unit, self-harm accounted for 0.90% of total attendances to general emergency departments in the country. This percentage of attendances accounted for by self-harm varied by HSE hospital group from 0.25% in the Children's, 0.74% in the Saolta University, 0.85% in the University of Limerick, 1.00% in the South/ South West and Ireland East, 1.01% in the RCSI and 1.14% in the Dublin Midlands hospital groups.

The proportion of self-harm presentations treated in each hospital group in 2015 ranged from 3% in the Children's, 7% in the University of Limerick, to 13% in the Saolta University, 15% in the RCSI, 19% in the Dublin Midlands, 20% in the South/ South West and 24% in the Ireland East hospital group.

The gender balance of recorded episodes in 2015 (at 45% men to 55% women) varied by hospital group (Figure 1). Self-harm presentations by women outnumbered those by men in all but one of the seven hospital groups, South/South West hospital group.

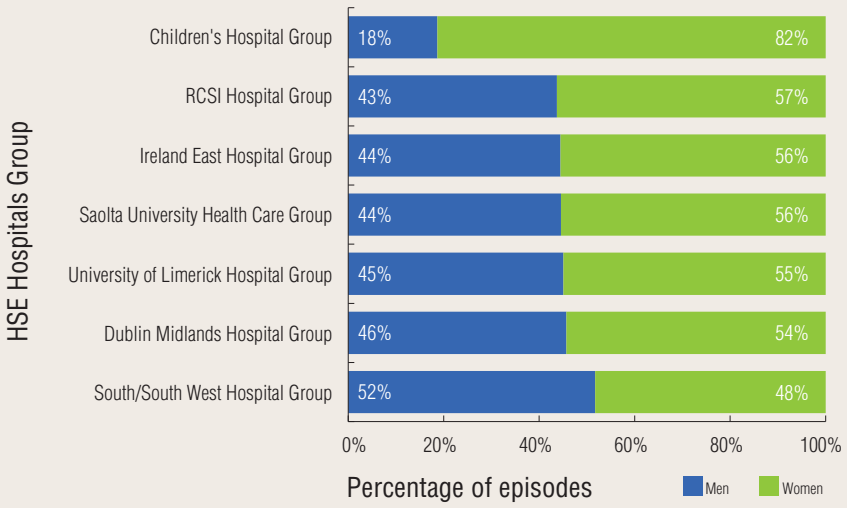


Figure 1: Gender balance of self-harm presentations by HSE hospital group.

Annual change in self-harm presentations to hospital

While the national number of self-harm presentations to hospital in 2015 was similar to that in 2014, there were some relatively large changes in the number of presentations at the level of the individual hospitals (Figures 2a and 2b). Overall, 18 general hospitals saw an increase in self-harm presentations between 2014 and 2015, while 18 general hospitals saw a decrease during the same period. Overall, the most pronounced changes were in small hospitals, where two hospitals saw decreases of 40% or more. This change in self-harm presentations is thought to reflect the re-designation in 2013 of a number of hospitals as Model 2 status hospitals, with emergency departments closing or working on reduced hours.[1]

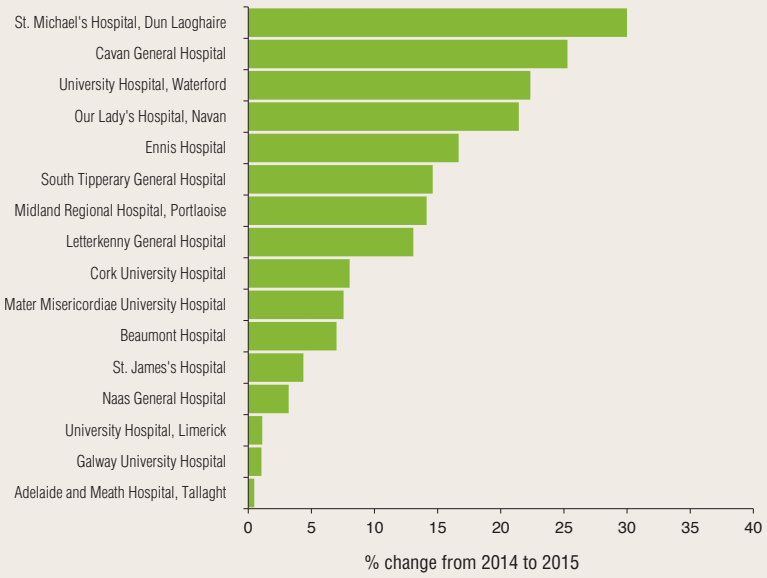


Figure 2a: Hospitals receiving more self-harm presentations in 2015.[2]

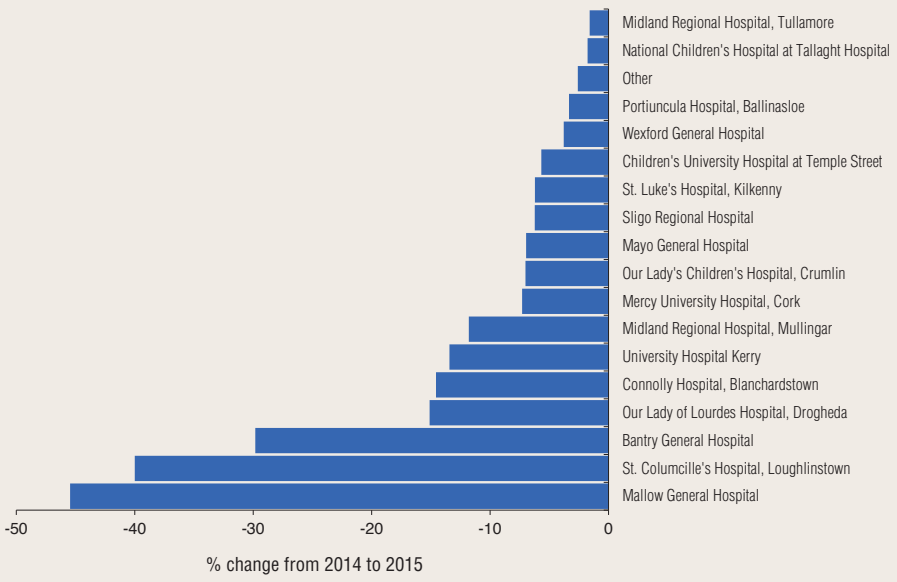


Figure 2b: Hospitals receiving fewer self-harm presentations in 2015.

[1] It should be noted that in small hospitals, large percentage changes are based on relatively small numbers.

[2] Figure 2a excludes two hospitals where the increase was based on very small numbers (n<5).

Episodes by time of occurrence

Variation by month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Men	430	425	415	435	488	437	444	438	364	391	406	395	5068
Women	519	476	576	545	576	459	501	529	479	485	512	464	6121
Total	949	901	991	980	1064	896	945	967	843	876	918	859	11189

Table 2: Number of self-harm presentations in 2015 by month for men and women.

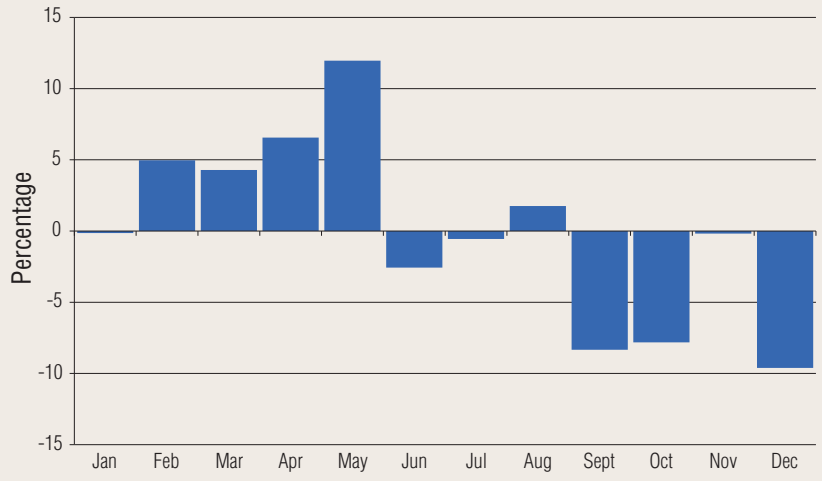


Figure 3: Percentage difference between the observed and expected number of self-harm presentations by month in 2015.

The monthly average number of self-harm presentations to hospitals in 2015 was 932. Figure 3 illustrates the percentage difference between observed and expected number of presentations, accounting for the number of days in each calendar month. In 2015, there were more self-harm presentations than might be expected between February and May, with May recording 12% more presentations than might be expected. The end of year fall in presentations was similar to previous years. September and October both received 8% fewer presentations than might be expected and December also recorded fewer presentations than might be expected (-10%).

Variation by day

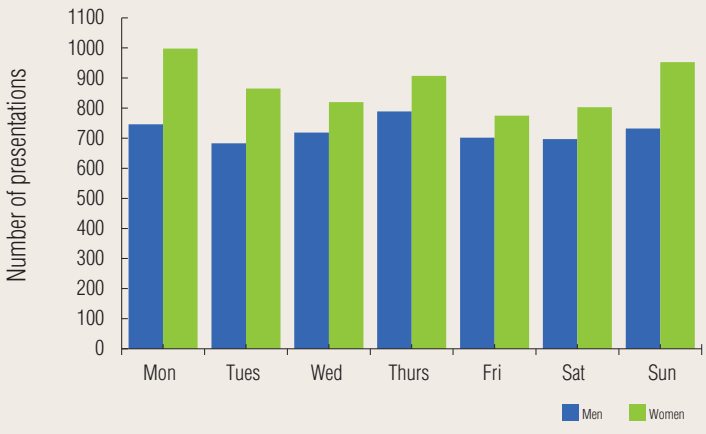


Figure 4: Number of presentations by weekday, 2015.

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Men	746	683	719	789	702	697	732	5068
	(14.7%)	(13.5%)	(14.2%)	(15.6%)	(13.9%)	(13.8%)	(14.4%)	(100%)
Women	998	865	820	907	775	803	953	6121
	(16.3%)	(14.1%)	(13.4%)	(14.8%)	(12.7%)	(13.1%)	(15.6%)	(100%)
Total	1744	1548	1539	1696	1477	1500	1685	11189
	(15.6%)	(13.8%)	(13.8%)	(15.2%)	(13.2%)	(13.4%)	(15.1%)	(100%)

Note: On average, each day would be expected to account for 14.3% of presentations.
Table 3: Self-harm presentations in 2015 by weekday.

As in previous years, the number of self-harm presentations was highest on Mondays and Sundays. These days accounted for 31% of all presentations. Numbers fell after Monday before rising again on Saturday. A secondary peak in presentations was observed on Thursdays in 2015 for both men and women, accounting for 15% of all presentations. This pattern of the number of presentations by day of the week was more pronounced in men than women.

During 2015, there was an average of 31 self-harm presentations to hospital each day. January 1st, New Year's Day and 18th March (the day after St. Patrick's Day) both recorded the highest number of presentations (n=49). The association between increased self-harm presentations and public holidays has been a consistent pattern over many years, although this was not strongly reflected in 2015 patterns.

Variation by hour

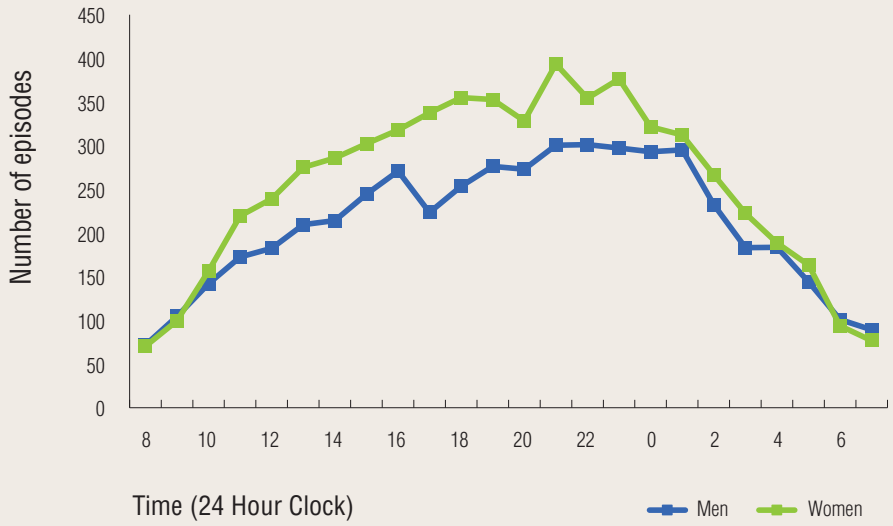


Figure 5: Number of presentations by time of attendance.

As in previous years, there was a striking pattern in the number of self-harm presentations seen over the course of the day. The numbers for both men and women gradually increased during the day. The peak for men was 10pm and for women was 9pm. Almost half (44 %) of the total number of presentations were made during the eight-hour period 7pm-3am. This contrasts with the quietest eight-hour period of the day, from 5am-1pm, which accounted for just 19% of all presentations.

Almost half (48%) were brought to hospital by ambulance and a further 3% were brought by other emergency services such as An Garda Siochana. The proportion brought by ambulance or other emergency services varied over the course of the day from 41% for presentations between noon and 4pm to 64% for those who presented between midnight and 8am.

Method of self-harm

	Overdose	Alcohol	Poisoning	Hanging	Drowning	Cutting	Other	Total
Men	2967	1743	125	545	198	1452	315	5068
	(58.5%)	(34.4%)	(2.5%)	(10.8%)	(3.9%)	(28.7%)	(6.2%)	(100%)
Women	4352	1772	111	245	170	1531	258	6121
	(71.1%)	(28.9%)	(1.8%)	(4%)	(2.8%)	(25%)	(4.2%)	(100%)
Total	7319	3515	236	790	368	2983	573	11189
	(65.4%)	(31.4%)	(2.1%)	(7.1%)	(3.3%)	(26.7%)	(5.1%)	(100%)

Table 4: Methods of self-harm involved in presentations to hospital in 2015.

Almost two-thirds (65%) of all self-harm presentations involved an overdose of medication. Drug overdose was more commonly used as a method of self-harm by women than by men. It was involved in 59% of male and 71% of female episodes. Alcohol was involved in 31% of all cases. Alcohol was significantly more often involved in male episodes of self-harm than female episodes (34% and 29%, respectively).

Cutting was the only other common method of self-harm, involved in 27% of all episodes. Cutting was significantly more common in men (29%) than in women (25%). In 92% of all cases involving self-cutting, the treatment received was recorded. Just under one-third (28%) received steristrips or steribonds, 51% did not require any treatment, 18% required sutures while 3% were referred for plastic surgery. Men who cut themselves more often required intensive treatment. Respectively, 21% received sutures and 4% were referred for plastic surgery compared to 15% and 2% of women who cut themselves.

Attempted hanging was involved in 7% of all self-harm presentations (11% for men and 4% for women). At 790, the number of presentations involving attempted hanging was only marginally higher (+1%) than 2014 (+2% for men and -2% for women). Overall, the number of self-harm presentations involving hanging increased between 2007 and 2015 from 444 to 790. While rare as a method of self-harm, the number of presentations involving attempted drowning increased by 21% among women in 2015 (from 140 to 170).

The greater involvement of drug overdose as a female method of self-harm is illustrated in Figure 6. Drug overdose also accounted for a higher proportion of self-harm presentations in the older age groups, in particular for women, whereas self-cutting was less common. Self-cutting was most common among young people – in 30% of presentations by girls under 15 years and 24% of presentations by men aged under 25 years.

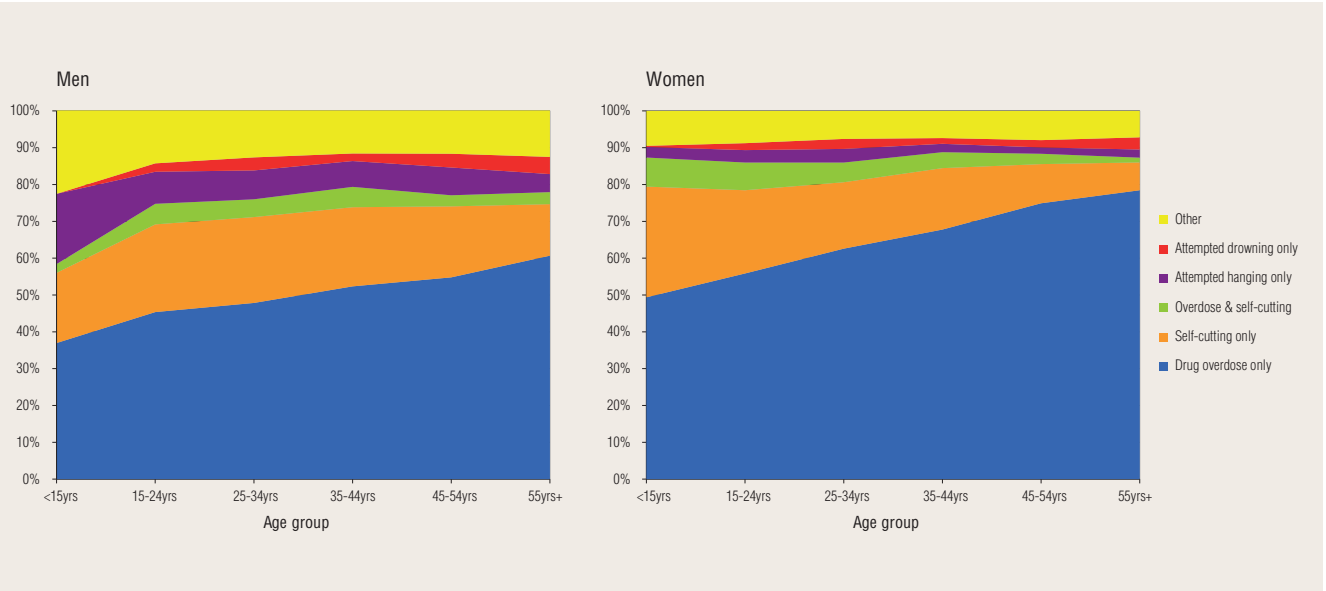


Figure 6: Method of self-harm used by gender and age group, 2015.

Drugs used in overdose

The total number of tablets taken was known in 69% of all cases of drug overdose. On average, 28 tablets were taken in the episodes of self-harm that involved drug overdose. Three-quarters of drug overdose acts involved less than 35 tablets, half involved less than 20 tablets and one quarter involved less than 11 tablets. On average, the number of tablets taken in overdose acts was fairly similar for both men and women (mean: 30 vs. 27). Figure 7 illustrates the pattern of the number of tablets taken in drug overdose episodes for both genders. Half (52%) of female episodes and 47% of male episodes of overdose involved 10-29 tablets.

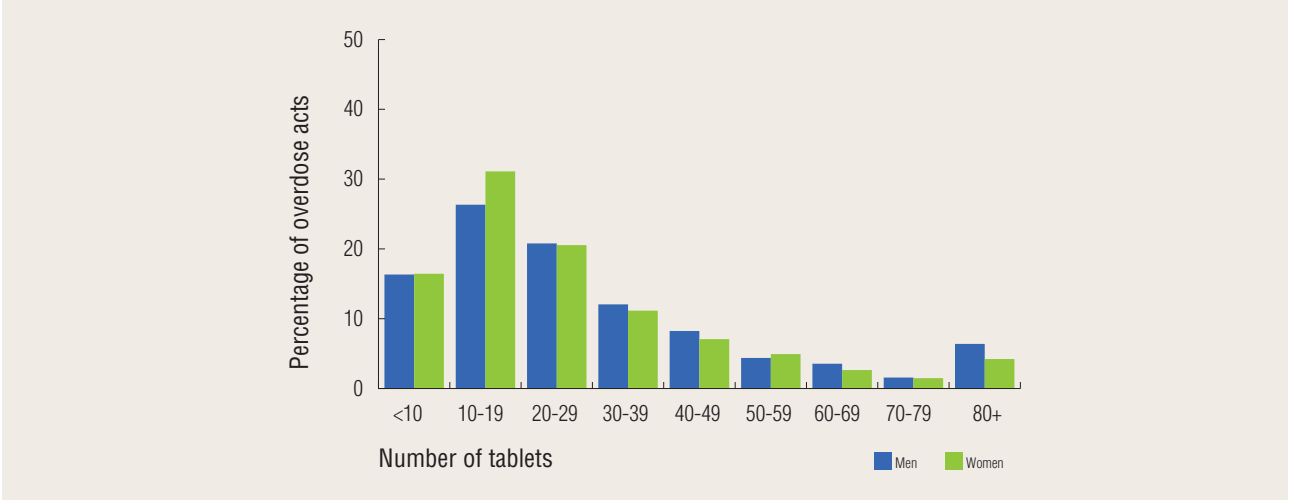
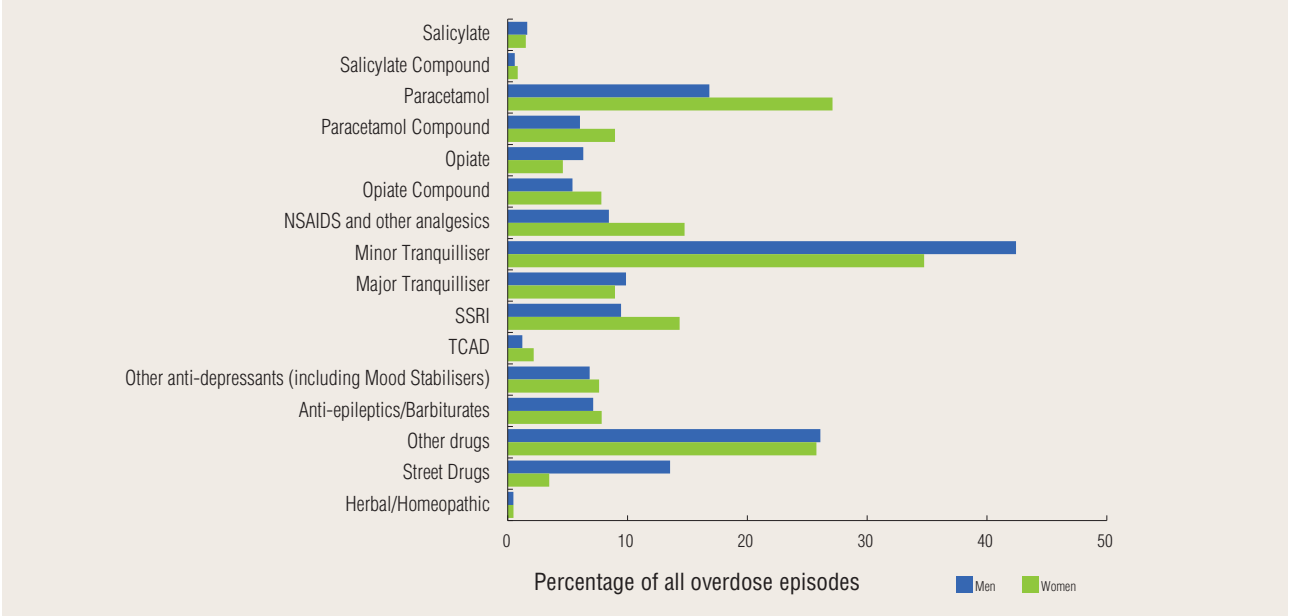


Figure 7: The pattern of the number of tablets taken in male and female acts of drug overdose.



Note: Some drugs (e.g. compounds containing paracetamol and an opiate) are counted in two categories.
Figure 8: The variation in the type of drugs used.

Figure 8 illustrates the frequency with which the most common types of drugs were used in overdose. More than one-third (38%) of all overdoses involved a minor tranquilliser and such a drug was used significantly more often by men than by women (42% vs. 35%, respectively). A major tranquilliser was involved in 9% of overdoses. In total, 46% of all female overdose acts and 33% of all male overdose acts involved an analgesic drug. Paracetamol was the most common analgesic drug taken, involved in some form in 29% of drug overdose acts. Paracetamol-containing medication was used significantly more often by women (34%) than by men (22%). One in five acts (20%) of overdose acts involved

an anti-depressant/ mood stabiliser. The group of anti-depressant drugs known as Selective Serotonin Reuptake Inhibitors (SSRIs) were present in 12% of overdose cases. Street drugs were involved in 14% of male and 3% of female overdose acts. 'Other prescribed drugs' were taken in approximately one quarter (26%) of all overdoses which reflects the wide range of drugs taken deliberately in acts of drug overdose.

The number of self-harm presentations to hospital involving drug overdose in 2015 (7,319) was similar to the number recorded in 2014 (n=7,314). However, there was some fluctuation in the number of presentations involving each of the drug types described here. Most notably, there was an increase in both the number of self-harm presentations involving Nonsteroidal Anti-inflammatory Drugs (NSAIDs) and Tricyclic Antidepressants (TCADs) by 8%. Further increases were observed in the use of salicylate compound medication (+27%) and minor tranquilisers (+3%). Decreases were observed in presentations involving salicylate medication (-19%), herbal/ homeopathic medication (-12%) and SSRIs (-7%).

In 2015, the number of self-harm presentations to hospital involving street drugs increased by 18% from 2014 (following an increase in 2014 by 11%) to 547, which is higher than the level recorded in 2008 (n=462).

Recommended next care

Overall, in 13% of 2015 cases, the patient left the emergency department before a next care recommendation could be made. Following their treatment in the emergency department, inpatient admission was the next stage of care recommended for 32% of cases, irrespective of whether general or psychiatric admission was intended and whether the patient refused or not. Of all self-harm cases, 23% resulted in admission to a ward of the treating hospital whereas 9% were admitted for psychiatric inpatient treatment from the emergency department. It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, direct psychiatric admission figures provided here may be underestimates. In addition, some of the patients admitted to a general hospital ward will subsequently be admitted as psychiatric inpatients. In 1% of cases, the patient refused to allow him/ herself to be admitted whether for general or psychiatric care. Most commonly, 55% of cases were discharged following treatment in the emergency department.

	Overdose (n=7319)	Alcohol (n=3515)	Poisoning (n=236)	Hanging (n=790)	Drowning (n=368)	Cutting (n=2983)	Other (n=614)	All (n=11189)
General admission	28.1%	20.9%	34.7%	12.4%	10.6%	12.1%	18.2%	22.7%
Psychiatric admission	7.3%	6.1%	8.1%	19.6%	21.5%	8.8%	14.3%	8.8%
Patient would not allow admission	0.9%	0.9%	0.4%	0.9%	0.5%	0.5%	0.3%	0.8%
Left before recommendation	12.5%	17.0%	7.2%	9.6%	13.9%	14.0%	12.5%	12.8%
Not admitted	51.2%	55.0%	49.6%	57.5%	53.5%	64.6%	54.6%	55.0%

Table 5: Recommended next care in 2015 by methods of self-harm.

Next care recommendations in 2015 were broadly similar for men and women. Men more often left the emergency department before a recommendation was made (15% vs. 11%). Women were more often admitted to a ward of the treating hospital than men (26% vs. 19%).

Recommended next care varied according to the method of self-harm (Table 5). General inpatient care was most common following cases of self-poisoning and drug overdose, less common after attempted hanging and least common after self-cutting and attempted drowning. The finding in relation to self-cutting may be a reflection of the superficial nature of the injuries sustained in some cases. Of those cases where the patient used cutting as a method of self-harm, 65% were discharged after receiving treatment in the emergency department. The greater the potential lethality of the method of self-harm involved, the higher the proportion of cases admitted for psychiatric inpatient care directly from the emergency department.

Next care varied significantly by HSE hospital group (Table 6). The proportion of self-harm patients who left before a recommendation was made varied from <1% in the Children's hospital group to 16% in the

RCSI hospital groups. Across the hospital groups, inpatient care (irrespective of type and whether patient refused) was recommended for 19% of the patients treated in the University of Limerick, 29% in the Dublin Midlands, 31% in the RCSI, 32% in the Ireland East and the South/ South West, 40% in the Saolta University and 65% in the Children's hospital groups. As a corollary to this, the proportion of cases discharged following emergency treatment ranged from a low of 35% in the Children's group to a high of 70% in the University of Limerick group. The balance of general and psychiatric admissions directly after treatment in the emergency department differed significantly by hospital group. Overall, direct general admissions were more common than direct psychiatric admissions in all but the University of Limerick hospital group, where psychiatric admissions were more common.

Appendix 2 details the recommended next care for self-harm patients treated at every hospital. For each hospital group, there were significant differences between the hospitals in their pattern of next care recommendations.

	Ireland East Hospital Group	Dublin Midlands Hospital Group	RCSI Hospital Group	South/ South West Hospital Group	University of Limerick Hospital Group	Saolta University Health Care Group	Children's Hospital Group	Republic of Ireland
	(n=2646)	(n=2146)	(n=1690)	(n=2230)	(n=749)	(n=1431)	(n=297)	(n=11189)
General admission	24.8%	19.9%	21.2%	22.9%	7.6%	23.8%	63.3%	22.7%
Psychiatric admission	6.7%	7.8%	8.8%	8.7%	11.3%	14.4%	0%	8.8%
Patient would not allow admission	0.1%	1.5%	1%	0.1%	0.3%	1.7%	1.7%	0.8%
Left before recommendation	11.6%	14.4%	16.4%	11.4%	10.7%	14%	0.3%	12.8%
Not admitted	56.8%	56.4%	52.6%	56.8%	70.1%	46.1%	34.7%	55%

Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in this table may be underestimates.

Table 6: Recommended next care in 2015 by HSE hospital group.

Self-harm patients discharged from emergency department

In 2013 the Registry began recording referrals for patients discharged from the emergency department following self-harm (n=6,158).

For 2015, referrals following discharge included the following:

- In 32% of episodes, an out-patient appointment was recommended as a next care step for the patient.
- Recommendations to attend their GP for a follow-up appointment were given to 17% of discharged patients.
- Of those not admitted to the presenting hospital, one in ten were transferred to another hospital for treatment (7% for psychiatric treatment and 3% for medical treatment).
- Other services (e.g. psychological services, community-based mental health teams and addiction services) were recommended in 15% of episodes.
- One quarter (25%) of patients discharged from the emergency department were discharged home without a referral.

There was variation in referrals offered to self-harm patients according to HSE hospital group, with 60% and 65% of patients in the Children's and University of Limerick groups referred for an out-patient appointment compared with 17% in the Ireland East Groups. Referrals to community-based mental health teams were highest in Saolta University Group (25%), with referrals to general practitioners highest in the Ireland East Hospital Group (26%).

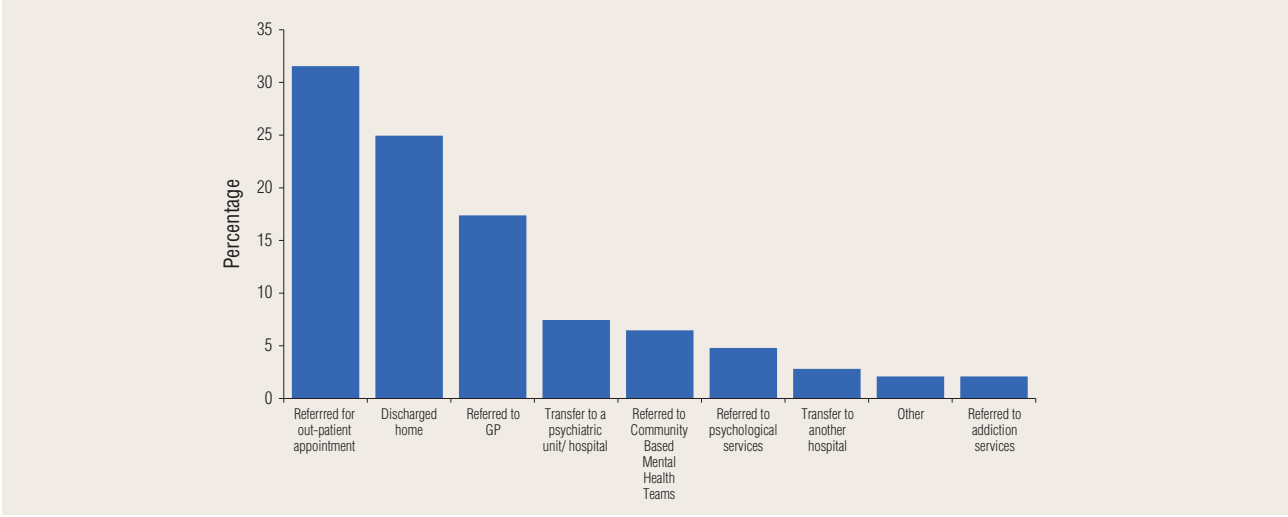


Figure 9: Referral of self-harm patients in 2015 following discharge from the emergency department.

Mental health assessment

Whether the patient had a mental health assessment in the presenting hospital was known in 95% of all cases. Of those known, 73% (n=7,730) of patients were assessed by a member of the mental health team in 2015 (75% for women, 71% for men). The majority (86%) of under 15 year-olds received a psychiatric assessment. Assessment was most common following attempted drowning (81%) and attempted hanging (83%).

More than three-quarters (82%) of those not admitted to the presenting hospital received a psychiatric assessment prior to discharge. However, only 14% of patients who left before recommendation/ against medical advice received an assessment.

Psychiatric assessment varied according to whether the self-harm attendance was a repeat presentation or not. Almost three-quarters (74%) of first presentations of self-harm were assessed, compared with 59% of those with 5 or more presentations in 2015.

Repetition of self-harm

There were 8,791 individuals treated for 11,189 self-harm episodes in 2015. This implies that more than one in five (2,398, 21.4%) of the presentations in 2015 were due to repeat acts, which is similar to the years 2003-2009 and 2013-2014 (range: 20.5-23.1%). Of the 8,791 self-harm patients treated in 2015, 1,283 (14.6%) made at least one repeat presentation to hospital during the calendar year. This proportion is within the range reported for the years 2003-2014 (13.8-16.4%). At least five self-harm presentations were made by 126 individuals in 2015. They accounted for just 1.4% of all self-harm patients in the year but their presentations represented 8.7% (n=977) of all self-harm presentations recorded.

The rate of repetition varied highly significantly with the method of self-harm involved in the self-harm act (Table 7). Of the commonly used methods of self-harm, self-cutting was associated with an increased level of repetition. Almost one in five (18.7%) who used cutting as a method of self-harm in their index act made at least one subsequent self-harm presentation in the calendar year.

	Overdose	Alcohol	Poisoning	Hanging	Drowning	Cutting	Other	All
Number of individuals treated	5899	2859	192	660	289	2113	428	8791
Number who repeated	817	392	30	79	51	396	57	1283
Percentage who repeated	13.8%	13.7%	15.6%	12%	17.6%	18.7%	13.3%	14.6%

Table 7: Repeat presentation after index self-harm presentation in 2015 by methods of self-harm.

The rate of repetition was broadly similar in men and women (14.5% vs. 14.7%). Repetition varied significantly by age. Approximately 13% of self-harm patients aged less than 19 years re-presented with self-harm in 2015. The proportion who repeated was highest, at 17%, for 25-54 year-olds.

There was little variation in repetition rates when examined by HSE hospital group (Table 8). The lowest rate was among self-harm patients treated in the South/ South West hospital group (13.5%), with repetition rates ranging from 14.7%-16.1% across the other groups.

		Ireland East Hospital Group	Dublin Midlands Hospital Group	RCSI Hospital Group	South/ South West Hospital Group	University of Limerick Hospital Group	Saolta University Health Care Group	Children's Hospital Group	Republic of Ireland
Number of individuals treated	Men	929	783	589	983	266	527	48	4002
	Women	1186	893	782	872	337	631	202	4789
	TOTAL	2115	1676	1371	1855	603	1158	250	8791
Number who repeated	Men	151	117	87	128	46	80	6	580
	Women	190	151	114	122	49	97	32	703
	TOTAL	341	268	201	250	95	177	38	1283
Percentage who repeated	Men	16.3%	14.9%	14.8%	13%	17.3%	15.2%	12.5%	14.5%
	Women	16%	16.9%	14.6%	14%	14.5%	15.4%	15.8%	14.7%
	TOTAL	16.1%	16%	14.7%	13.5%	15.8%	15.3%	15.2%	14.6%

Table 8: Repetition in 2015 by gender and HSE hospital group.

The country's 32 HSE Local Health Offices (LHOs) have been the central focus of all HSE primary, community and continuing care services.

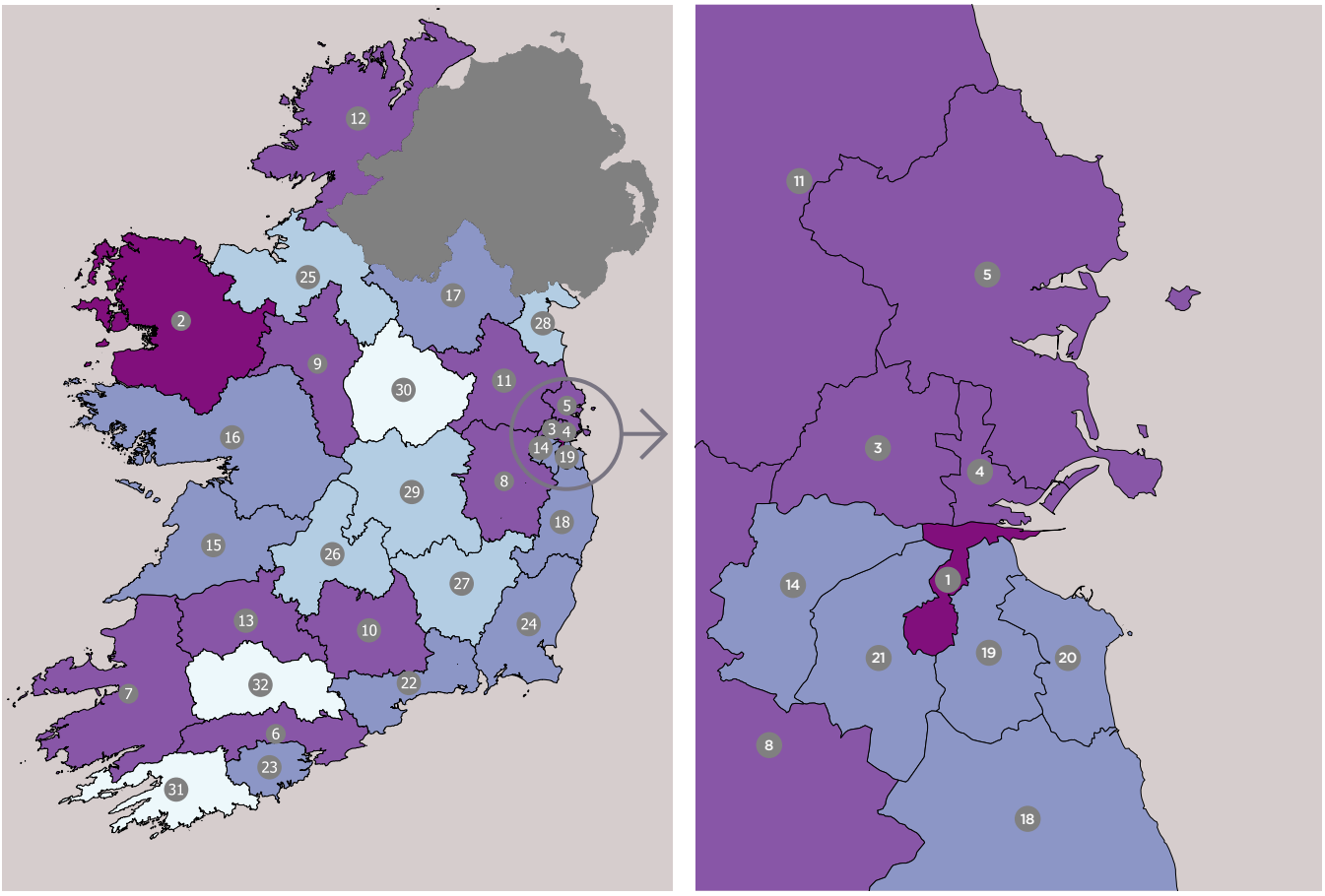
For 2015, the thematic map provided illustrates the variation in the overall rate of repetition within one year by LHO area. Rates of repetition varied significantly by LHO area. Dublin South City, Mayo and Dublin North West had the highest rates of repetition (20.2%, 19.5% and 17.6%, respectively). The lowest rates of repetition were seen in Cork North, Cork West and Longford/ Westmeath (5.6%, 6.2% and 7.3%, respectively).

While overall the rate of repetition in one year was broadly similar for men and women (14.5% vs. 14.7%), repetition rates by gender did vary by LHO area. The largest differences in the rate of repetition by gender were generally observed in those LHO areas with the highest repetition rates. The rate of repetition was higher for men in LHOs Dublin South City (23.1% vs. 17.7%) and Mayo (25.0% vs. 15.5%).

Appendix 3 details the repetition rate by hospital for male, female and all patients treated following self-harm in 2015. Caution should be taken in interpreting the repetition rates associated with LHOs and with smaller hospitals as the calculations may be based on a small number of patients.

Risk of repetition was greatest in the days and weeks following a self-harm presentation. A total of 8,536 self-harm presentations were made to hospital emergency departments in the first nine months of 2015. For 17.9% of these (n=1,529) there was a repeat self-harm presentation made within three months (91 days). This proportion varied significantly by HSE hospital group: South/ South West (13.7%), Children's (14.4%), University of Limerick (16.2%), Saolta University (17.1%), RCSI (18.9%), Ireland East (19.3%) and Dublin Midlands (21.2%).

This proportion of self-harm presentations followed by a repeat presentation within three months was similar for men (17.8%) and women (18.0%) but did vary by age group. The proportion was lowest among those aged under 15 years (8.6%) and over 55 years (12.5%), compared with 17.1% among 15-24 year-olds, 20.5% among 25-44 year-olds and 17.3% among those aged 45-54 years. The proportion of self-harm presentations followed by a repeat presentation within three months also varied according to method of self-harm (10.4% following an attempted hanging, 15.3% following a drug overdose, 16.9% following an attempted drowning, 24.7% following an act of self-cutting only and 27.4% following an act involving drug overdose and self-cutting).



Map 1: Rate of repetition (within 1 year) in the Republic of Ireland 2015 by HSE Local Health Office area for all presentations (Numbers indicate rank from 1 for highest to 32 for lowest)

All Person Rate of Repetition

- Self-harm rate of repetition greater than 18%
- Self-harm rate of repetition between 15% and 18%
- Self-harm rate of repetition between 12% and 15%
- Self-harm rate of repetition between 8% and 12%
- Self-harm rate of repetition less than 8%

Variation in the proportion of self-harm presentations followed by a repeat presentation within three months was also observed based on recommended next care following the initial act. The proportion was lowest for those who were admitted to a general ward (12.1%), compared to 17.6% of those who were not admitted, 24.0% who were admitted to a psychiatric ward and 20.0% who left before a recommendation/ refused admission.

However, the factor having by far the strongest influence on likelihood of repetition was the number of self-harm presentations made to hospital. Just one in ten (11.1%) first presentations in January-September 2015 were followed by a repeat presentation in the next three months. This proportion was 33.0% following second presentations, 45.2% following third presentations, 61.5% following fourth presentations and 78.5% following fifth or subsequent presentations.

"The rate of self-harm in 2015 was essentially unchanged from the previous year."

SECTION II:

Incidence Rates

For the period from 1 January to 31 December 2015, the Registry recorded 11,189 self-harm presentations to hospital that were made by 8,791 individuals. Based on these data, the Irish person-based crude and age-standardised rate of self-harm in 2015 was 190 (95% CI: 186 to 194) and 204 (95% CI: 199 to 208) per 100,000, respectively. Thus, the age-standardised rate in 2015, which accounts for the changing age distribution of the population, was essentially unchanged from 2014 (200 per 100,000). This increase was not statistically significant. In recent years there were successive decreases in the self-harm rate between 2011 and 2013, and an essentially unchanged rate between 2013 and 2014. The rate in 2015 was still 9% higher than in 2007, the year before the economic recession.

	MEN		WOMEN		ALL	
YEAR	Rate	% difference	Rate	% difference	Rate	% difference
2002	167	-	237	-	202	-
2003	177	+7%	241	+2%	209	+4%
2004	170	-4%	233	-4%	201	-4%
2005	167	-2%	229	-1%	198	-2%
2006	160	-4%	210	-9%	184	-7%
2007	162	+2%	215	+3%	188	+2%
2008	180	+11%	223	+4%	200	+6%
2009	197	+10%	222	-<1%	209	+5%
2010	211	+7%	236	+6%	223	+7%
2011	205	-3%	226	-4%	215	-4%
2012	195	-5%	228	+1%	211	-2%
2013	182	-7%	217	-5%	199	-6%
2014	185	+2%	216	-<1%	200	+1%
2015	186	+1%	222	+3%	204	+2%

Table 9: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2002-2015 (extrapolated data used for 2002-2005 to adjust for non-participating hospitals).

Population figures and the number and rate of persons treated in hospital following self-harm in 2015 are given in Appendix 4 by age and gender for persons residing in the Republic of Ireland and for the residents of each of the four HSE regions.

Variation by gender and age

The person-based age-standardised rate of self-harm for men and women in 2015 was 186 (95% CI: 181-192) and 222 (95% CI: 216-228) per 100,000, respectively. Thus, there was a 1% increase in the male rate of self-harm and a 3% increase in the female rate of self-harm. However, these changes were not statistically significant. Taking recent years into account, the male self-harm rate in 2015 was 15% higher than in 2007 whereas the female rate was 3% higher.

The female rate of self-harm in 2015 was 19% higher than the male rate. This gender difference has been decreasing in recent years. The female rate was 37% higher in 2004-2005, 32-33% higher in 2006-2007, 24% higher in 2008, and 10-19% higher in 2009-2014.

There was a striking pattern in the incidence of self-harm when examined by age. The rate was highest among the young. At 718 per 100,000, the peak rate for women was among 15-19 year-olds. This rate implies that one in every 139 girls in this age group presented to hospital in 2015 as a consequence of self-harm. The peak rate for men was 553 per 100,000 among 20-24 year-olds or one in every 181 men. The incidence of self-harm gradually decreased with increasing age in men. This was the case to a lesser extent in women as their rate remained relatively stable, at about 231 per 100,000, across the 30 to 54 year age range.

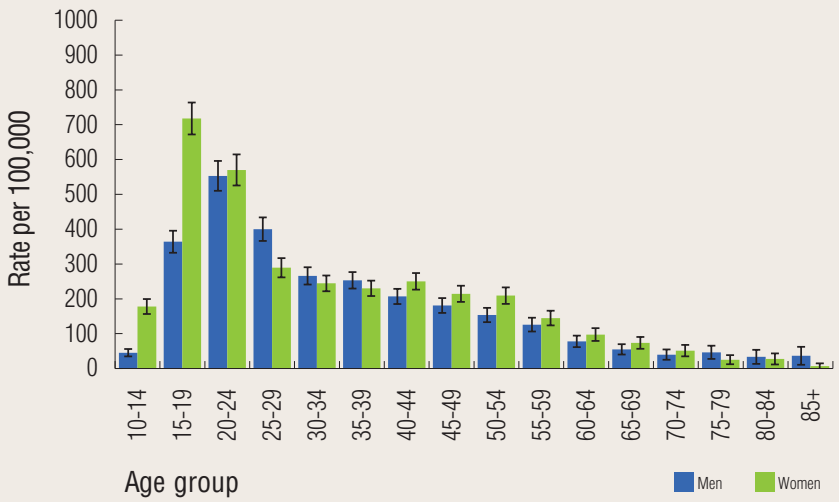
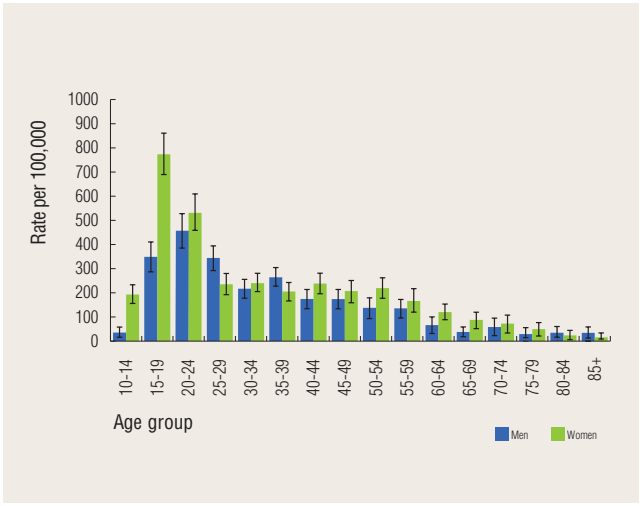


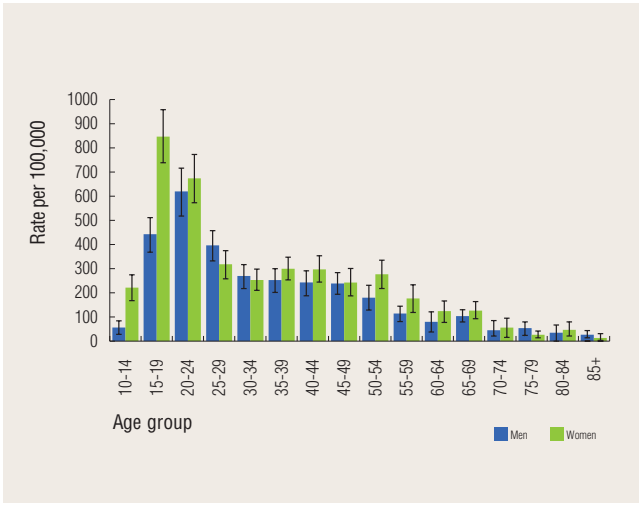
Figure 10: Person-based rate of self-harm in the Republic of Ireland in 2015 by age and gender.

Gender differences in the incidence of self-harm varied with age. The female rate was three times higher than the male rate in 10-14 year-olds (178 vs. 45 per 100,000, respectively) and 97% higher than the male rate in 15-19 year-olds (718 vs. 364 per 100,000, respectively). The female rate of self-harm was again higher than the male rate across the 45-59 year age range. However, in 25-29 year-olds, the male rate was 38% higher than the female rate (400 vs. 289 per 100,000, respectively). Since 2009, the Registry has recorded a significantly higher rate of self-harm in men in this age group compared to women.

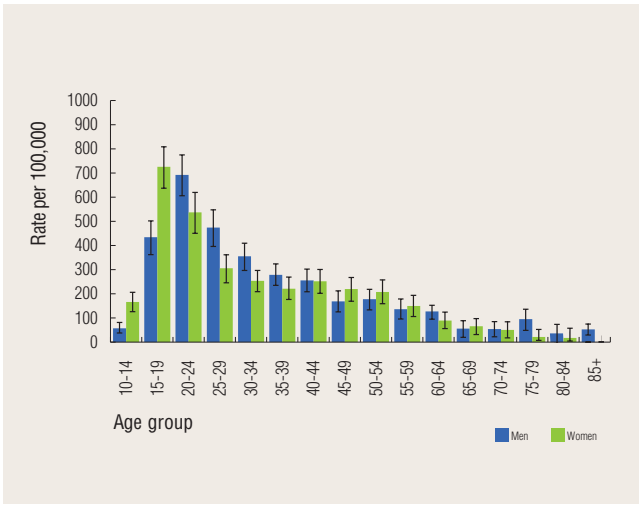
In 2015, the only significant change in the rate of hospital-treated self-harm by age were among men aged 35-39 years, where the rate increased by 15% from 220 to 253 per 100,000.



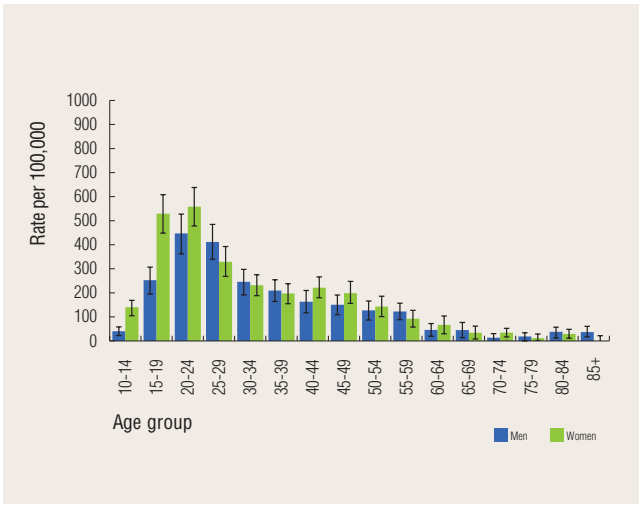
(a) HSE Dublin/Mid-Leinster



(b) HSE Dublin/North East



(c) HSE South



(d) HSE West

Figure 11: Person-based rate of self-harm in 2015 by residents of the four HSE regions by age and gender.

Figure 11 shows the incidence of self-harm by age and gender for the residents of each of the country's four HSE regions. The pattern was broadly similar to that at national level. The self-harm rate was highest among the young – among 15-24 year-olds for women and among 20-24 year-olds for men. The peak self-harm rate was among women aged 15-19 years in all regions except for HSE West where a peak among 20-24 year-old women was found. The male self-harm rate exceeded the female rate in the age group 20-24 years in HSE South.

Self-harm was rare in 10-14 year-olds, particularly for boys. However, the incidence of self-harm increased rapidly over a short age range. This is illustrated in greater detail in Figure 12. In 12-20 year-olds, the female rate of self-harm was significantly higher than the male rate. The increases in the female rate in early teenage years were particularly striking. The peak rates among younger people were in 20 year-old men and women, with rates of 684 and 889 per 100,000, respectively.

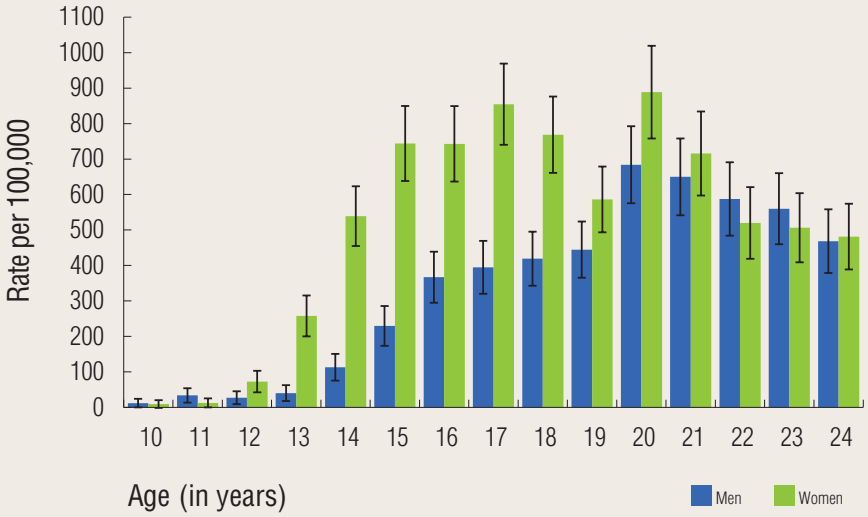


Figure 12: Person-based rate of self-harm in the Republic of Ireland in 2015 by single year of age for 10-24 year-olds.

Variation by HSE region

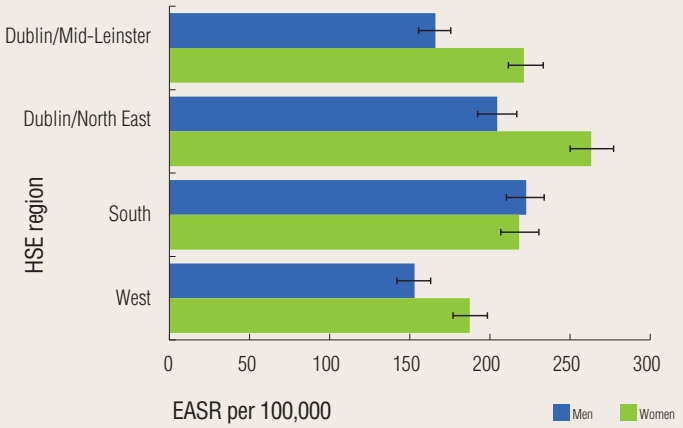


Figure 13: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 by HSE region of residence and gender.

The 19% higher incidence of self-harm for women compared to men varied by HSE region. The female rate of self-harm was significantly higher than the male rate in HSE Dublin/ Mid-Leinster by 33%, HSE Dublin/ North East by 29% and in HSE West by 22%.

In 2015, the incidence of self-harm was significantly higher than the national rate for men in the HSE south region (+20%) and for men and women in the Dublin/ North East region (+10% and 19%, respectively). The rate was significantly lower in the HSE West region for men and women (-18% and -16%, respectively).

The only significant change in the rate of self-harm by HSE region was observed for the female rate in HSE West, which increased by 11% (Table 11).

While at a national level the rate of hospital-treated self-harm in men according to age did not change, there were some changes according to HSE regions. The national increase among 35-39 year-old men was reflected in HSE Dublin/ Mid-Leinster (+34%). There was more than a two-fold (+226%) increase in the male rate of self-harm among those aged 65-69 years in HSE Dublin/ North East and a 96% increase among 60-64 year-old men in HSE South. The female rate increased by 35% among 20-24 year-olds in HSE West.

	Men					Women				
HSE region	Rate	95% CI*	Rate difference**	95% CI**	% difference	Rate	95% CI*	Rate difference**	95% CI***	% difference
Dublin/Mid-Leinster	166.2	(+/-12)	-20	(+/-11)	-10.8	221.8	(+/-14)	0	(+/-12)	-0.2
Dublin/North East	204.7	(+/-12)	18	(+/-14)	9.9	263.5	(+/-12)	41	(+/-15)	18.6
South	222.7	(+/-10)	36	(+/-13)	19.6	218.8	(+/-11)	-3	(+/-13)	-1.5
West	153.6	(+/-10)	-33	(+/-12)	-17.6	187.7	(+/-11)	-34	(+/-13)	-15.5
Ireland	186.3	(+/-6)				222.2	(+/-6)			

*95% Confidence Interval for the HSE region self-harm rate.
**Rate difference = HSE region rate – national rate for men and women.
***95% Confidence Interval for self-harm rate difference.
Table 10: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 by HSE region of residence and gender with comparison to the national rate.

	Men					Women				
HSE region	2015	2014	Rate difference	95% CI*	% difference	2015	2014	Rate difference	95% CI*	% difference
Dublin/Mid-Leinster	166.2	170.6	-4	(+/-17)	-2.5	221.8	215.3	6	(+/-19)	3.0
Dublin/North East	204.7	194.9	10	(+/-17)	5.0	263.5	259.9	4	(+/-17)	1.4
South	222.7	214.2	9	(+/-15)	4.0	218.8	223.5	-5	(+/-15)	-2.1
West	153.6	161.2	-8	(+/-14)	-4.8	187.7	168.9	19	(+/-15)	11.1
Ireland	186.3	185.1	1	(+/-8)	0.6	222.2	216.3	6	(+/-8)	2.7

*95% Confidence Interval for self-harm rate difference.
Table 11: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 and 2014 by HSE region of residence and gender.

Urban and rural district comparison by HSE region

Figure 14 illustrates the self-harm rate for residents of urban districts and rural districts in each of the four HSE regions. Nationally, the incidence of persons presenting to hospital with self-harm was 263 per 100,000 for residents of urban districts which was nearly twice (84%) the incidence rate of 143 per 100,000 among residents of rural districts. Across all HSE regions, the incidence of self-harm was significantly higher in the urban district population. Compared to rural district populations, the self-harm rate was 64%, 4%, 80% and 205% higher in the urban district populations of the HSE regions of Dublin/ Mid-Leinster, Dublin/ North East, South and West, respectively.

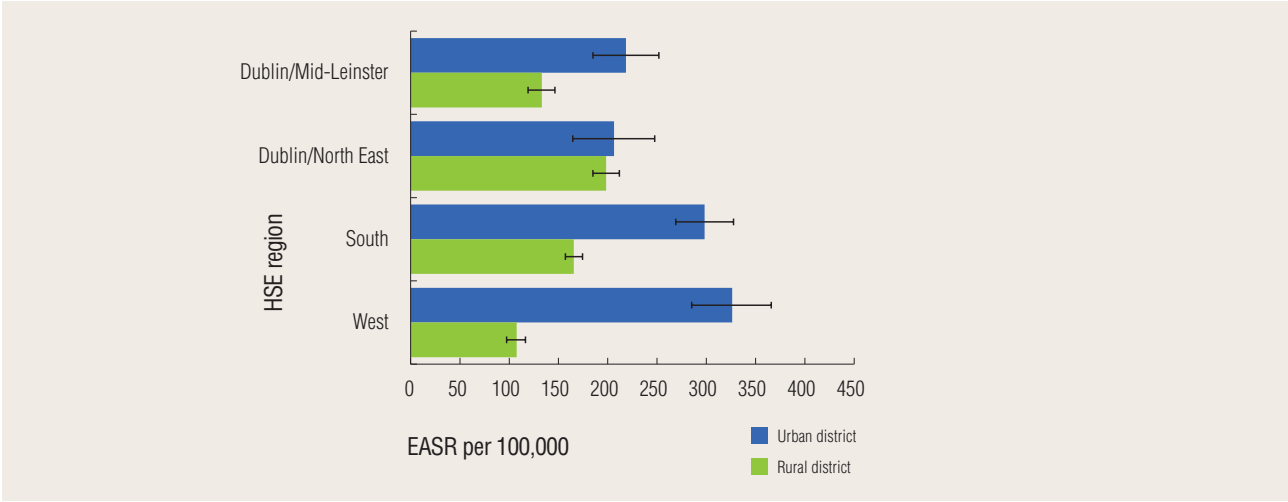


Figure 14: Person-based European age-standardised rate (EASR) of self-harm in 2015 for urban and rural district residents by HSE region.

Rate by city and county

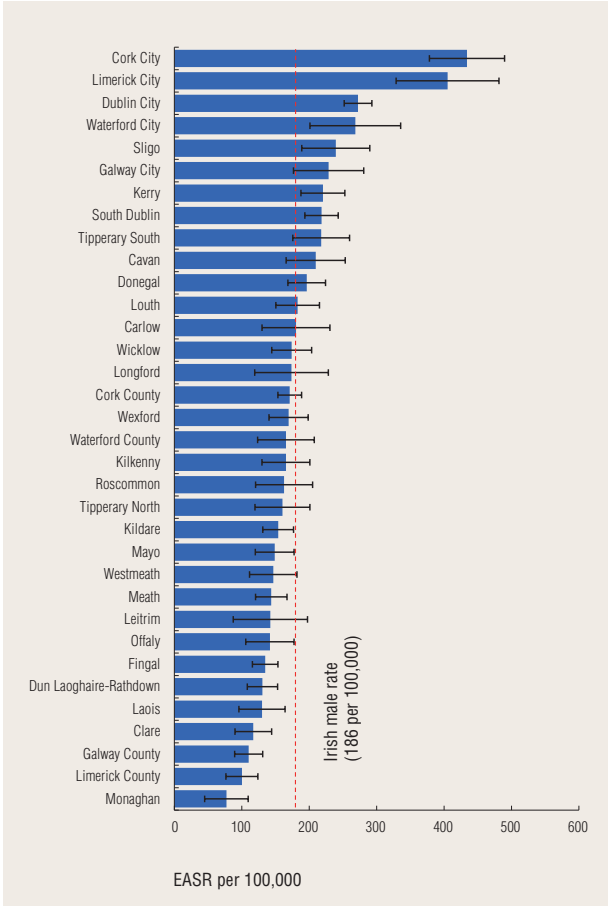


Figure 14a: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 by city/county of residence for **men**.

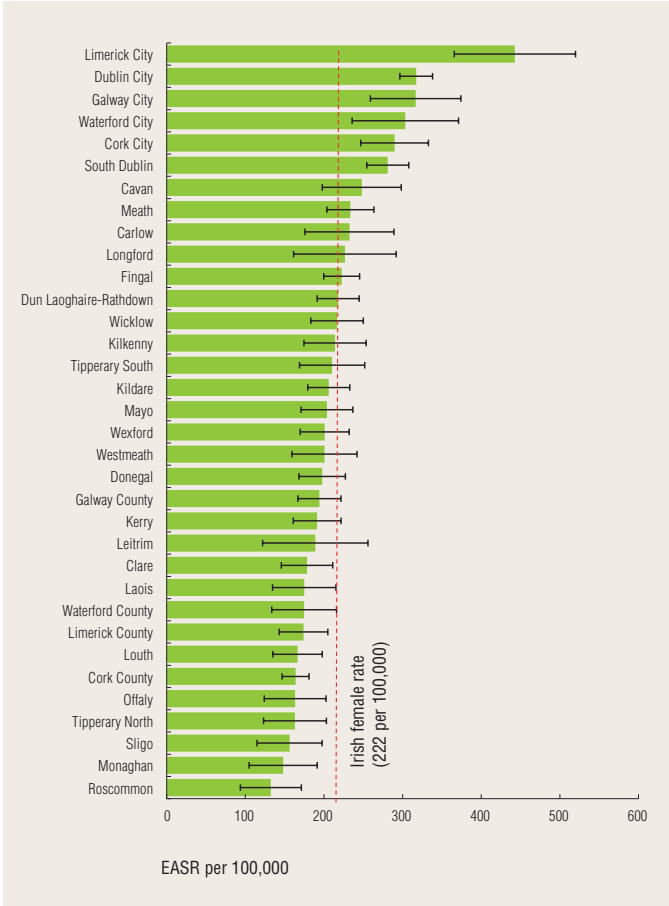


Figure 14b: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 by city/county of residence for **women**.

There was widespread variation in the male and female self-harm rate when examined by city/county of residence. The male rate varied from 77 per 100,000 for Monaghan to 434 per 100,000 for Cork City. The lowest female rates were recorded for Roscommon (133 per 100,000) with the highest rates recorded for Limerick City residents at 443 per 100,000. Relative to the national rate, a high rate of self-harm was recorded for male and female city residents and for men living in Sligo, Kerry, South Dublin and Tipperary South and

for women living in South Dublin, Cavan, Meath and Carlow. In 2015 high rates for both men and women were seen in Cork City, where the male rate was 1.3 times higher than the national average and the female rate was 30% higher. In Limerick City the male and female rates were approximately twice as high as the national average (+118% for men; +99% for women).

At a national level, the female self-harm rate exceeded the male rate by 19%. The magnitude of this gender difference varied by city/ county. The female rate far exceeded the male rate in Monaghan (+92%), Galway County (+76%), Limerick County (+74%), Dun-Laoghaire Rathdown (+67%) and Fingal (+65%). The opposite pattern of a significantly lower female rate was observed in Sligo (-35%), Cork City (-33%) and Roscommon (-19%).

Compared to 2014, a significant increase in the male rate of self-harm was observed in Dublin City (+15%), while significant increases in the female rate of self-harm were observed in Waterford City (+49%), Tipperary South (+47%), Donegal (+37%) and Meath (+23%). Significant decreases in the male rate of self-harm were observed in Monaghan (-44%), Limerick County (-30%), Galway County (-29%) and Mayo (-25%). The only significant decrease for women was observed in Clare (-25%).

There were significant year-to-year increases in the rate of hospital-treated self-harm in Ireland since the advent of the economic recession in 2008. Despite decreases in recent years, the overall rate has increased by 9% since 2007, from 188 to 204 per 100,000. The male rate has increased by 15% from 162 to 186 per 100,000 and the female rate has increased by 3% from 215 to 222 per 100,000. Figures 15a and 15b illustrate, for each county and city, the percentage change in the rate of hospital-treated self-harm from 2007 to 2015.

There have been notable increases in the male rate of self-harm in Leitrim, Cork County, Sligo and South Dublin. Increases in the female rate of self-harm were observed in Leitrim, South Dublin, Kilkenny and Longford.

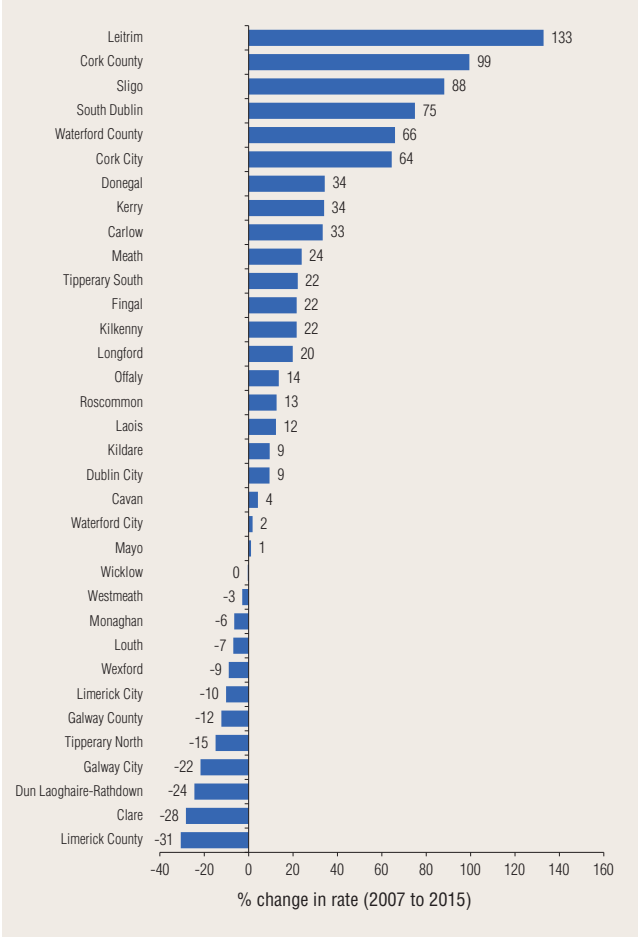


Figure 15a: Percentage change from 2007 to 2015 in the person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland by city/county of residence for **men**.

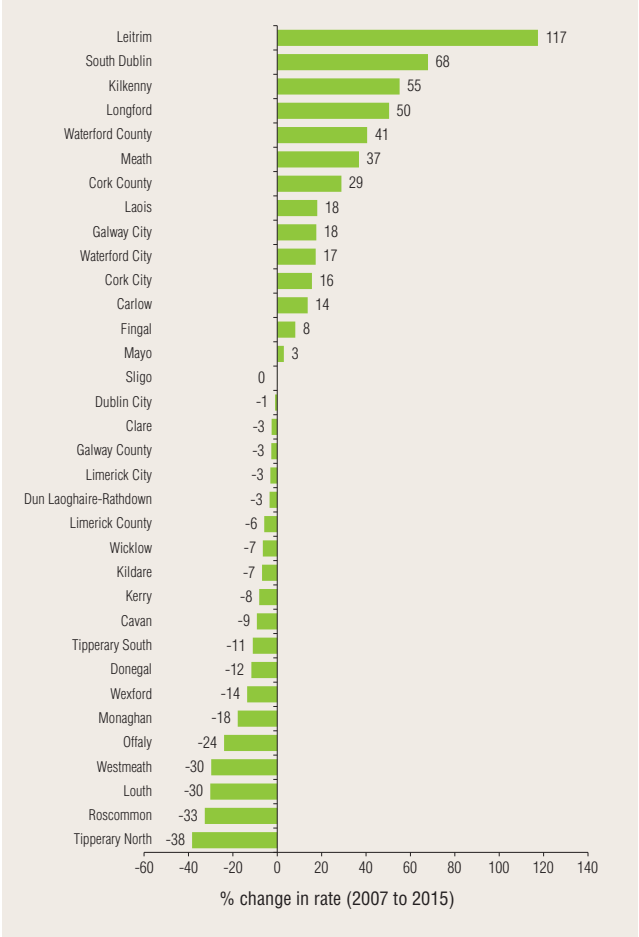


Figure 15b: Percentage change from 2007 to 2015 in the person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland by city/county of residence for **women**.

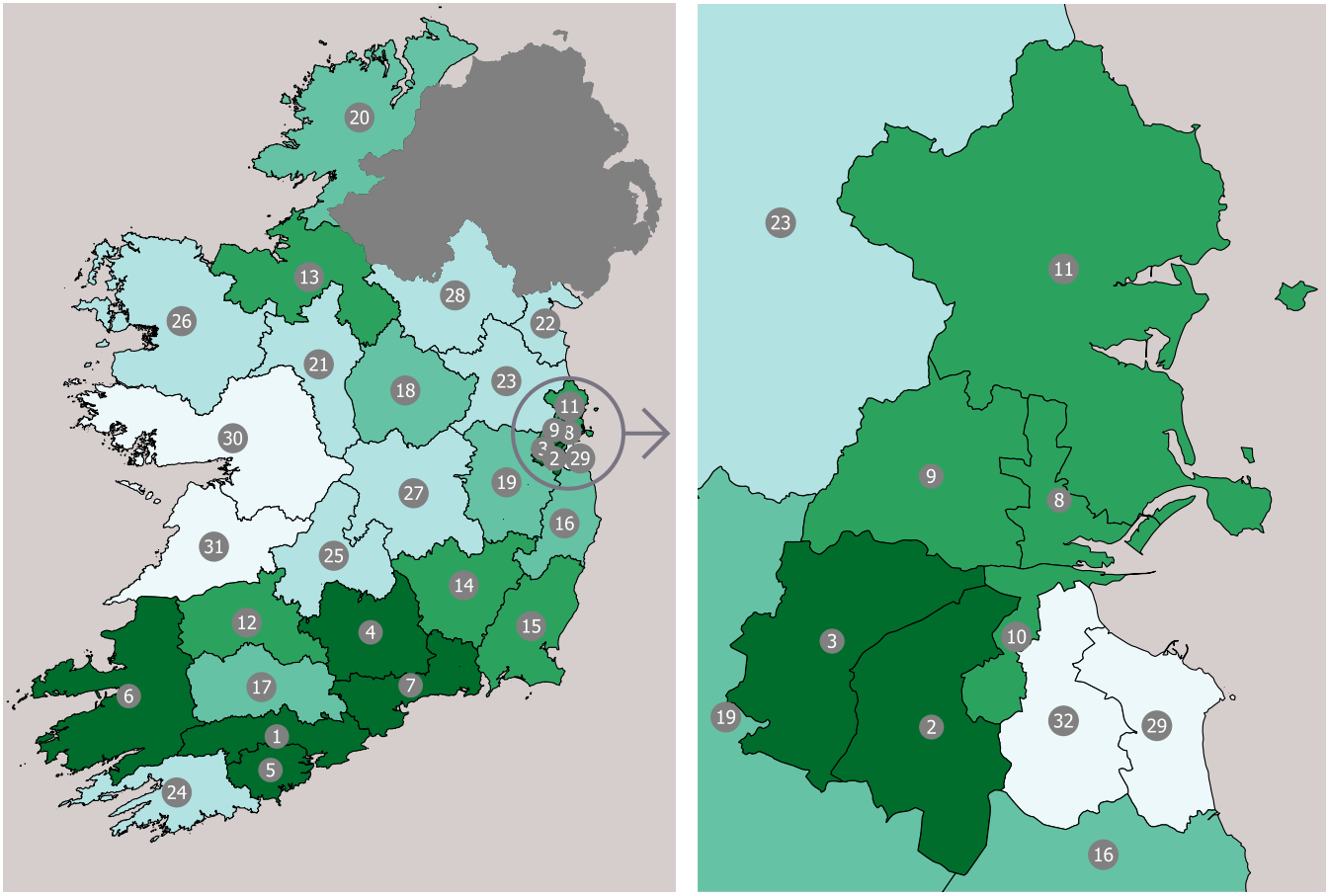
Rate by HSE Local Health Office (LHO)

For 2015, Table 12 details the population (derived by the National Census 2011), number of men and women who presented to hospital as a result of self-harm and the incidence rate (age-adjusted to the European standard population) for each LHO area. Thematic maps are also provided to illustrate the variation in the male and female incidence of hospital-treated self-harm by LHO area.

There was approximately a two-fold difference in the rate of self-harm when examined by LHO area. The rate for men ranged from 101 per 100,000 in Dublin South East to 255 per 100,000 in Cork North Lee and for women ranged from 110 per 100,000 in West Cork to 312 per 100,000 in Dublin South West. The female rate exceeded 240 per 100,000 for Dublin South West, Dublin West, Dublin North West and Limerick. The male rate exceeded 220 per 100,000 in Cork North Lee, Dublin South West and Dublin West.

HSE Region and LHO		MEN				WOMEN			
			SELF-HARM				SELF-HARM		
		Population*	Persons	Rate**	Rank	Population*	Persons	Rate**	Rank
DUBLIN MID LEINSTER	Dublin South City	69042	124	176	10	71143	152	218	11
	Dublin South East	57530	64	102	32	62502	117	196	18
	Dublin South West	75078	175	232	2	79393	241	312	1
	Dublin West	72067	174	229	3	74265	208	288	2
	Kildare/West Wicklow	113750	162	147	19	114660	239	214	13
	Laois/Offaly	79017	99	128	27	78229	126	171	24
	Longford/Westmeath	62432	90	148	18	62732	128	215	12
	Dun Laoghaire	62008	74	119	29	68555	122	183	21
	Wicklow	58450	85	152	16	60092	123	214	14
DUBLIN NORTH EAST	Cavan/Monaghan	66734	79	123	28	65639	114	181	23
	Dublin North	119057	205	174	11	125305	279	233	6
	Dublin North Central	66320	132	180	8	69059	155	218	10
	Dublin North West	98800	189	177	9	102945	252	255	3
	Louth	60763	83	137	22	62134	87	147	29
	Meath	91910	118	136	23	92225	206	238	5
SOUTH	Carlow/Kilkenny	65251	103	161	14	65064	139	224	8
	Cork North	44889	64	150	17	44642	76	186	19
	Cork North Lee	90708	233	255	1	91094	203	232	7
	Cork South Lee	93436	198	204	5	97733	160	163	26
	Cork West	28437	35	136	24	28093	30	110	32
	Kerry	72629	137	203	6	72873	125	183	20
	Tipperary South	47156	94	209	4	46980	90	203	15
	Waterford	63520	123	202	7	64287	132	223	9
	Wexford	71909	106	161	15	73411	137	197	17
WEST	Clare	58298	60	107	31	58898	85	151	28
	Donegal	80523	110	146	20	80614	125	168	25
	Galway	124758	150	118	30	125895	249	201	16
	Limerick	76749	130	167	12	77638	187	243	4
	Mayo	65420	80	129	26	65218	109	181	22
	Tipperary North/East Limerick	54406	71	129	25	53338	75	141	30
	Roscommon	32353	43	140	21	31712	33	111	31
	Sligo/Leitrim/West Cavan	49299	77	161	13	49185	71	152	27

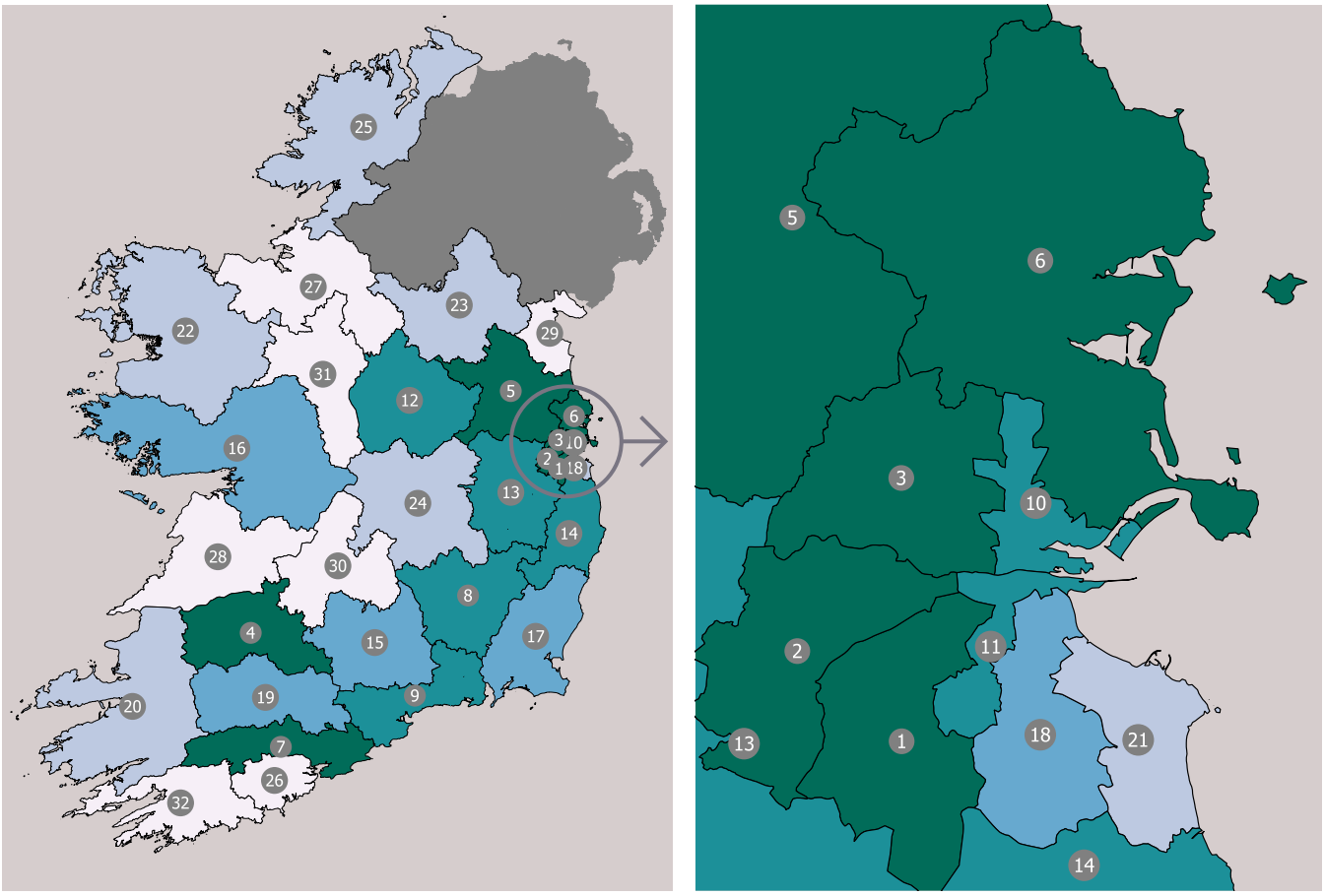
*Population derived by the National Census 2011
**Person-based European age-standardised rate per 100,000 population
Table 12: Self-harm in 2015 by HSE Local Health Office (LHO) area of residence and gender.



Map 2: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 by HSE Local Health Office area for men (Numbers indicate rank of rate from 1 for highest to 32 for lowest)

Male rate of self-harm

- Self-harm rate greater than 200
- Self-harm rate between 161 and 200
- Self-harm rate between 141 and 160
- Self-harm rate between 122 and 140
- Self-harm rate less than 122



Map 3: Person-based European age-standardised rate (EASR) of self-harm in the Republic of Ireland in 2015 by HSE Local Health Office area for women (Numbers indicate rank of rate from 1 for highest to 32 for lowest)

Female rate of self-harm

- Self-harm rate greater than 230
- Self-harm rate between 215 and 230
- Self-harm rate between 185 and 214
- Self-harm rate between 164 and 184
- Self-harm rate less than 164

"Since 2007, the rate of self-harm involving methods of high lethality has increased."

SECTION III:

Research in focus: Methods associated with high lethality

The Registry records information on the means of self-harm involved in ED presentations. Some of these methods have a higher *lethality* due to their association with suicidal intent (e.g. attempted hanging or attempted drowning). In this section, the profile of self-harm presentations involving the use of highly lethal methods is explored.

The use of highly lethal methods is relatively uncommon, associated with a minority of self-harm presentations each year. In 2015, there were 845 self-harm presentations involving highly lethal methods of attempted hanging and attempted drowning, accounting for 8% of all attendances, and were more common among men than women (11% and 5%, respectively).

Across the period 2007 to 2015, those aged 15-34 years accounted for 57% of presentations involving highly lethal methods of self-harm. The involvement of alcohol was lower among highly lethal methods compared to all methods (34% vs. 38%).

Presentations involving highly lethal methods of self-harm were more likely to receive psychiatric admission following attendance (24% vs. 10%). However, a proportion (13%) of these presentations also left the ED without being seen, or refused admission (Figure 16).

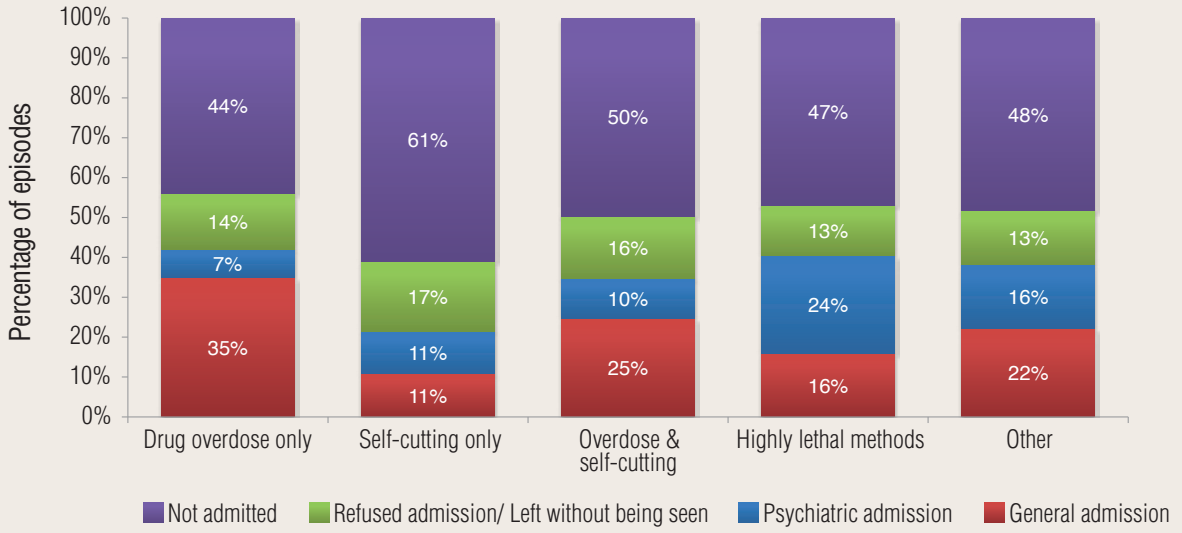


Figure 16: Recommended next care by method of self-harm, 2007-2015.

As previously stated, since 2013, the Registry has recorded whether a patient received an initial mental health assessment in the ED. For presentations involving highly lethal methods, an initial assessment was received in 79% of presentations, compared with 73% for all presentations.

Trends in highly lethal methods

The incidence rate of highly lethal methods over the period 2007-2015 was 14.9 per 100,000 (21.9 per 100,000 for men, 10.7 per 100,000 for women). Since 2007, the use of highly lethal methods has steadily increased (Figure 17). Over this period, the male rate increased by 47% (from 16.2 to 23.8 per 100,000) while the female rate increased by 55% (from 8.3 to 12.8 per 100,000).

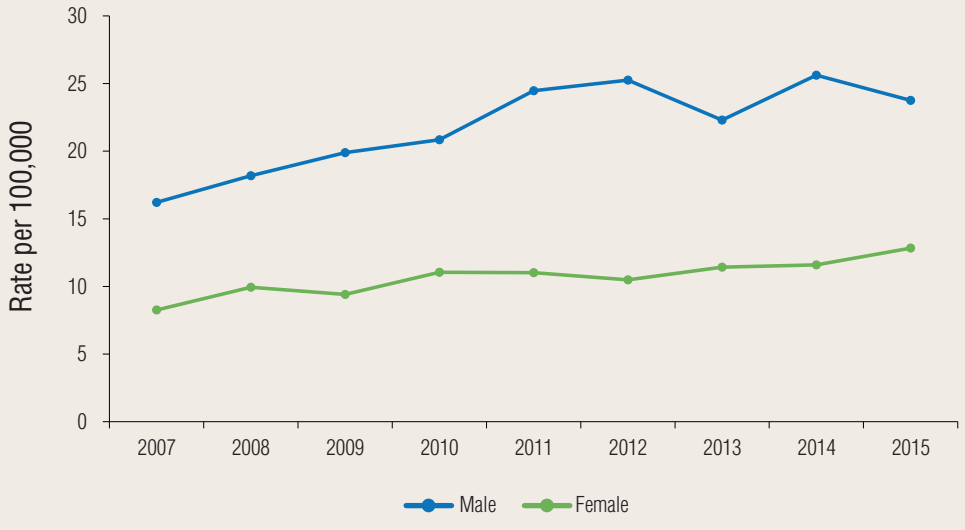


Figure 17: Trends in rates of self-ham presentations involving highly lethal methods, 2007-2015.

High-risk suicidal behaviour: Findings from the SSIS-ACE study

The Registry currently doesn't extend to including information on suicidal intent for self-harm patients. The SSIS-ACE study, funded by the Health Research Board, is a case-control study examining psychosocial, psychiatric and work-related risk factors associated with suicide in Ireland. As part of this study, consecutive presentations of *high-risk suicidal behaviour* (HRSB) were identified in two Cork emergency departments during the period June 2014 to August 2016. This study allows for a more detailed analysis of presentations involving HRSB.

Criteria for HRSB were defined as a combination of highly lethal methods of self-harm and clinical impression of high suicide intent (Figure 18). For each consecutive self-harm presentation, medical severity was assessed using the predefined criteria for medically serious suicide attempts. Circumstances related to the suicide attempt were also measured using the objective subscale of the Beck Suicide Intent Scale (Figure 19).

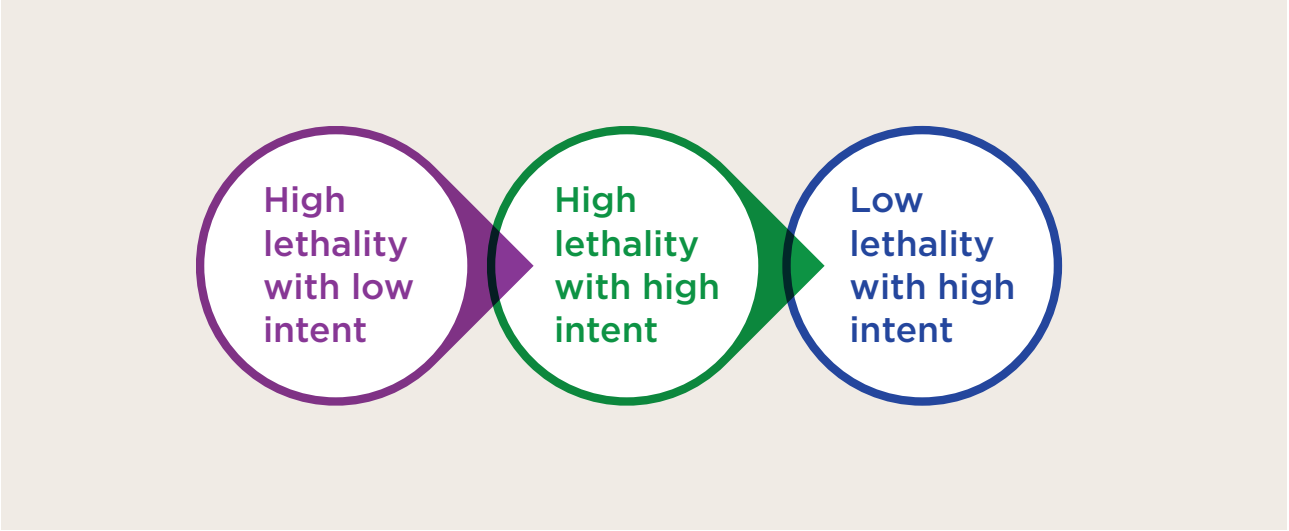


Figure 18: Criteria for recruitment of HRSB cases.

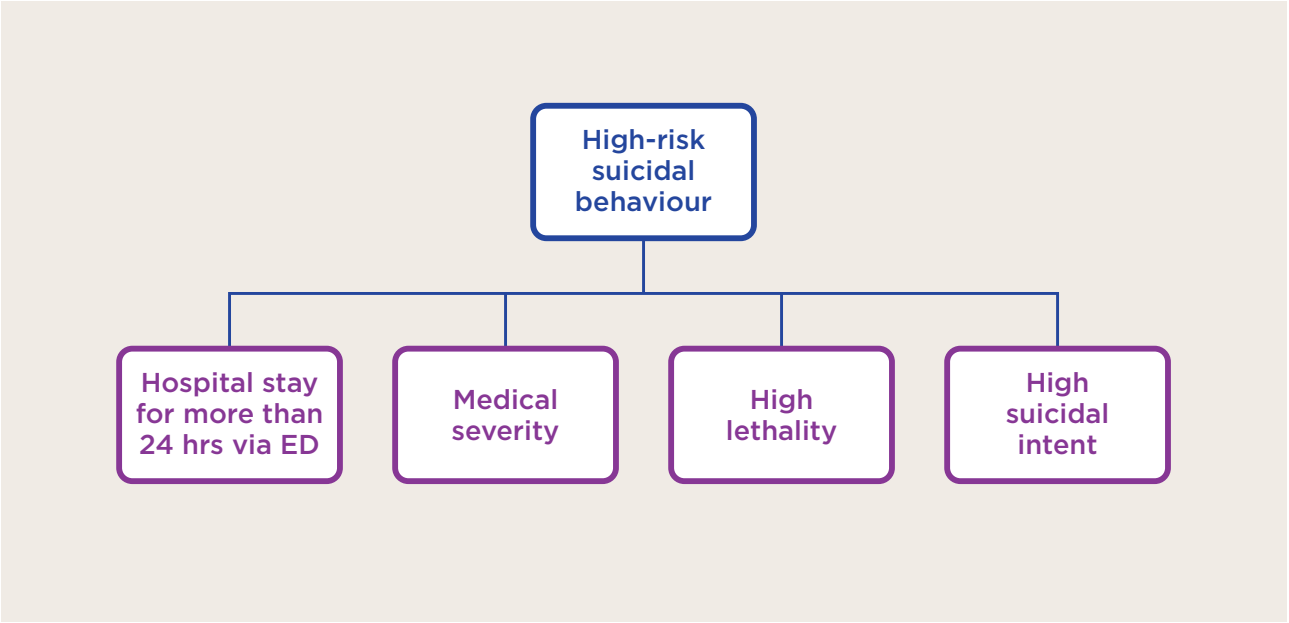


Figure 19: Inclusion criteria for accessing patients with HRSB.

During the 26-month study period, a total of 220 patients met the criteria for HRSB. The majority of participants were male (58%). The average age across both genders was 39 years (SD=13.5) with a peak in those aged 30-35 years.

Method of HRSB and suicidal intent

Half of the presentations involved a drug overdose, with other common methods of self-harm including hanging (18%) and highly lethal self-cutting (12%). There was a significant association between gender and method of HRSB. Men were significantly more likely to engage in HRSB when compared to females (Figure 20). This was particularly relevant for highly lethal methods such as hanging, severe self-cutting, use of firearms, jumping from a height and single vehicle road-traffic accidents. Women more frequently presented following an episode of overdose or self-poisoning (38%). Despite having engaged in HRSB, only 3% were regarded as having high suicidal intent.

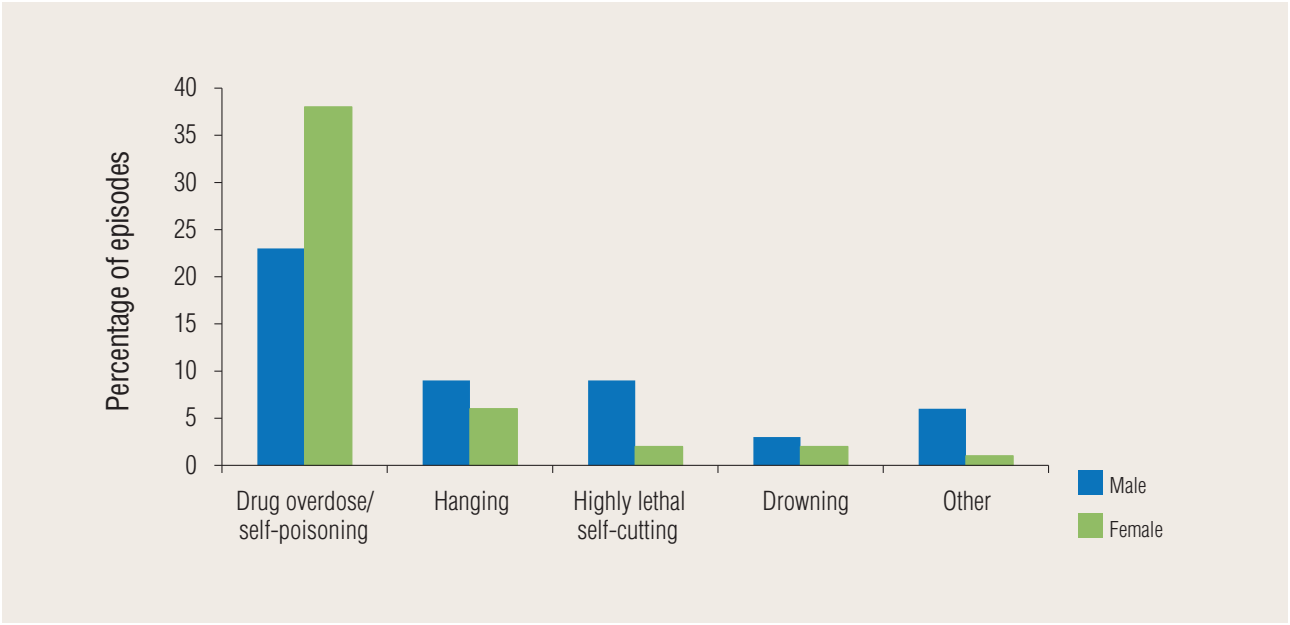


Figure 20: Relationship between gender and methods of HRSB.

"The Registry has had complete coverage of all hospital EDs since 2006."

APPENDIX I:

APPENDIX 1: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE REPUBLIC OF IRELAND BY HOSPITALS GROUP, 2015

HOSPITAL GROUP	IRELAND EAST		DUBLIN MIDLANDS		RCSI		SOUTH/ SOUTH WEST		UNIVERSITY OF LIMERICK		SAOLTA UNIVERSITY		CHILDREN'S		REPUBLIC OF IRELAND	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4yrs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-9yrs	0	0	0	0	0	0	<5	0	<5	0	<5	0	0	0	6	0
10-14yrs	10	20	<5	6	8	23	18	58	<5	21	13	52	25	136	78	316
15-19yrs	124	257	131	234	103	178	165	218	32	63	74	155	27	109	656	1214
20-24yrs	198	192	150	185	107	152	204	138	62	69	115	125	0	0	836	861
25-29yrs	180	171	128	113	89	97	158	111	40	48	99	84	0	0	694	624
30-34yrs	154	148	124	114	87	103	136	110	49	56	83	64	0	0	633	595
35-39yrs	143	162	136	124	96	91	120	75	51	48	58	66	0	0	604	566
40-44yrs	108	142	89	126	79	99	114	100	26	39	51	79	0	0	467	585
45-49yrs	97	127	91	84	57	69	60	80	32	19	38	69	0	0	375	448
50-54yrs	82	107	48	76	37	59	67	69	11	17	45	41	0	0	290	369
55-59yrs	26	68	44	35	23	40	48	54	15	14	32	27	0	0	188	238
60-64yrs	19	38	20	35	11	19	36	28	<5	9	10	18	0	0	100	147
65-69yrs	14	23	11	13	14	22	9	15	8	5	8	7	0	0	64	85
70-74yrs	8	8	9	10	5	6	6	11	<5	<5	<5	5	0	0	31	43
75-79yrs	<5	7	<5	<5	6	<5	10	<5	0	<5	<5	<5	0	0	25	15
80-84yrs	<5	<5	<5	<5	<5	<5	<5	<5	0	<5	<5	<5	0	0	13	12
85yrs+	<5	<5	0	<5	<5	0	<5	0	0	0	<5	0	0	0	8	<5
Total	1171	1475	987	1159	726	964	1161	1069	335	414	636	795	52	245	5068	6121

APPENDIX 1A: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE IRELAND EAST HOSPITAL GROUP, 2015

	MATER MISERICORDIAE UNIVERSITY HOSPITAL		MIDLAND REGIONAL HOSPITAL, MULLINGAR		OUR LADY'S HOSPITAL, NAVAN		ST. COLUMCILLE'S HOSPITAL, LOUGHLINSTOWN		ST. LUKE'S HOSPITAL, KILKENNY		ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE		OTHER		WEXFORD GENERAL HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	<5	8	0	0	0	0	<5	<5	0	0	<5	<5	<5	7
15-19yrs	28	51	10	20	11	33	<5	0	15	39	<5	<5	39	81	18	32
20-24yrs	78	57	13	13	12	18	<5	<5	21	21	<5	<5	51	59	21	19
25-34yrs	139	127	31	20	19	20	<5	<5	33	42	<5	8	89	72	18	29
35-44yrs	100	94	10	21	20	36	<5	<5	34	49	8	5	70	66	7	32
45-54yrs	66	65	11	26	20	26	0	0	24	26	<5	<5	41	62	16	28
55-64yrs	14	22	<5	10	5	12	0	<5	6	10	0	<5	10	40	8	7
65yrs+	7	7	<5	<5	<5	<5	<5	0	<5	<5	0	<5	8	23	6	<5
Total	432	423	81	121	90	148	7	5	139	193	15	24	309	405	98	156

APPENDIX 1B: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2015

	ADELAIDE AND MEATH HOSPITAL, TALLAGHT		MIDLAND REGIONAL HOSPITAL, PORTLAOISE		MIDLAND REGIONAL HOSPITAL, TULLAMORE		NAAS GENERAL HOSPITAL		ST. JAMES'S HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	<5	<5	0	<5	0	<5	0	0
15-19yrs	37	74	17	26	11	22	33	43	33	69
20-24yrs	51	56	7	13	7	9	28	27	57	80
25-34yrs	77	71	25	18	13	10	41	49	96	79
35-44yrs	63	72	14	27	8	10	32	76	108	65
45-54yrs	37	36	14	36	6	11	21	31	61	46
55-64yrs	19	21	<5	<5	6	<5	6	15	29	26
65yrs+	8	7	0	<5	<5	<5	8	7	7	9
Total	292	337	82	128	53	70	169	250	391	374

APPENDIX 1C: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE RCSI HOSPITAL GROUP, 2015

	BEAUMONT HOSPITAL		CAVAN GENERAL HOSPITAL		CONNOLLY HOSPITAL, BLANCHARDSTOWN		OUR LADY OF LOURDES HOSPITAL, DROGHEDA	
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	<5	6	8	0	<5	<5	13
15-19yrs	57	49	15	24	15	58	16	47
20-24yrs	41	71	16	21	23	37	27	23
25-34yrs	69	90	18	23	52	61	37	26
35-44yrs	59	58	23	28	43	69	50	35
45-54yrs	48	50	6	10	21	51	19	17
55-64yrs	10	19	<5	9	13	24	9	7
65yrs+	8	13	8	6	8	11	5	<5
Total	292	351	94	129	175	312	165	172

APPENDIX 1D: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE SOUTH/SOUTH WEST HOSPITAL GROUP, 2015

	BANTRY GENERAL HOSPITAL		CORK UNIVERSITY HOSPITAL		UNIVERSITY HOSPITAL KERRY		MALLOW GENERAL HOSPITAL		MERCY UNIVERSITY HOSPITAL, CORK		SOUTH TIPPERARY GENERAL HOSPITAL		UNIVERSITY HOSPITAL, WATERFORD	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	<5	16	17	<5	8	0	0	<5	10	0	5	<5	17
15-19yrs	<5	<5	52	57	21	31	<5	0	40	45	12	32	37	51
20-24yrs	0	0	76	39	31	15	0	<5	51	37	22	8	24	38
25-34yrs	5	6	85	57	45	33	<5	0	82	77	36	28	40	20
35-44yrs	<5	<5	60	40	30	35	<5	0	86	63	27	19	28	16
45-54yrs	<5	<5	34	48	29	21	0	0	26	30	7	22	27	24
55-64yrs	<5	6	23	13	11	18	<5	0	17	30	17	8	12	7
65yrs+	<5	<5	7	8	5	<5	0	<5	7	7	<5	<5	7	5
Total	17	23	353	279	173	162	<5	<5	311	299	125	126	178	178

APPENDIX 1E: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE UNIVERSITY OF LIMERICK HOSPITAL GROUP, 2015

	ENNIS HOSPITAL		NENAGH HOSPITAL		ST. JOHN'S HOSPITAL, LIMERICK		UNIVERSITY HOSPITAL, LIMERICK	
	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	0	0	0	0	0	0	<5	21
15-19yrs	0	<5	0	0	0	0	32	62
20-24yrs	<5	0	<5	0	0	0	60	69
25-34yrs	<5	<5	0	<5	<5	0	86	100
35-44yrs	<5	<5	0	0	<5	0	75	83
45-54yrs	<5	0	0	0	0	0	42	36
55-64yrs	0	<5	0	0	0	0	19	19
65yrs+	0	0	0	0	0	0	9	11
Total	<5	10	<5	<5	<5	0	327	401

APPENDIX 1F: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2015

	GALWAY UNIVERSITY HOSPITAL		LETTERKENNY GENERAL HOSPITAL		MAYO GENERAL HOSPITAL		PORTIUNCULA HOSPITAL, BALLINASLOE		SLIGO REGIONAL HOSPITAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<15yrs	<5	24	<5	5	<5	9	<5	<5	<5	12
15-19yrs	22	57	18	36	15	26	10	19	9	17
20-24yrs	35	48	32	36	21	15	15	10	12	16
25-34yrs	64	67	36	18	21	16	25	24	36	23
35-44yrs	35	43	18	42	22	24	9	19	25	17
45-54yrs	24	23	12	25	21	34	8	14	18	14
55-64yrs	6	22	5	7	9	7	8	8	14	<5
65yrs+	6	<5	0	0	8	5	0	<5	<5	5
Total	195	288	125	169	118	136	77	97	121	105

APPENDIX 1G: HOSPITAL-TREATED EPISODES OF SELF-HARM IN THE HSE CHILDREN'S HOSPITAL GROUP, 2015

	CHILDREN'S UNIVERSITY HOSPITAL AT TEMPLE STREET		NATIONAL CHILDREN'S HOSPITAL AT TALLAGHT HOSPITAL		OUR LADY'S CHILDREN'S HOSPITAL, CRUMLIN	
	Male	Female	Male	Female	Male	Female
<15yrs	12	59	7	54	6	23
15-19yrs	15	47	8	42	<5	20
20-24yrs	0	0	0	0	0	0
25-34yrs	0	0	0	0	0	0
35-44yrs	0	0	0	0	0	0
45-54yrs	0	0	0	0	0	0
55-64yrs	0	0	0	0	0	0
65yrs+	0	0	0	0	0	0
Total	27	106	15	96	10	43

APPENDIX II:

APPENDIX 2A: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE IRELAND EAST HOSPITAL GROUP, 2015

	MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. COLUMCILLE'S HOSPITAL, LOUGHLINSTOWN	ST. LUKE'S HOSPITAL, KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
	(n=855)	(n=202)	(n=238)	(n=12)	(n=332)	(n=39)	(n=714)	(n=254)
Admitted (general and psychiatric)	17.7%	53.5%	31.5%	33.3%	57.2%	28.2%	22.7%	52.4%
Patient would not allow admission	0%	0%	0%	0%	0.3%	0%	0.1%	0%
Left before recommendation	13.7%	10.9%	16.4%	0%	9.3%	12.8%	8.3%	13%
Not admitted	68.7%	35.6%	52.1%	66.7%	33.1%	59%	68.9%	34.6%

APPENDIX 2B: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2015

	ADELAIDE AND MEATH HOSPITAL, TALLAGHT	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
	(n=629)	(n=210)	(n=123)	(n=419)	(n=765)
Admitted (general and psychiatric)	21.5%	41.4%	40.7%	26.5%	27.6%
Patient would not allow admission	2.4%	0%	1.6%	2.9%	0.5%
Left before recommendation	11%	19%	10.6%	15.3%	16.1%
Not admitted	65.2%	39.5%	47.2%	55.4%	55.8%

Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Appendices 2A-2G may be underestimates.

APPENDIX 2C: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE RCSI HOSPITAL GROUP, 2015

	BEAUMONT HOSPITAL	CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
	(n=643)	(n=223)	(n=487)	(n=337)
Admitted (general and psychiatric)	22.4%	49.8%	34.9%	24.3%
Patient would not allow admission	1.2%	0%	1.6%	0.3%
Left before recommendation	14.5%	13.5%	12.9%	27%
Not admitted	61.9%	36.8%	50.5%	48.4%

APPENDIX 2D: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SOUTH/SOUTH WEST HOSPITAL GROUP, 2015

	BANTRY GENERAL HOSPITAL	CORK UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL KERRY	MALLOW GENERAL HOSPITAL	MERCY UNIVERSITY HOSPITAL, CORK	SOUTH TIPPERARY GENERAL HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
	(n=40)	(n=632)	(n=335)	(n=6)	(n=610)	(n=251)	(n=356)
Admitted (general and psychiatric)	62.5%	40.8%	36.4%	0%	15.9%	33.5%	33.7%
Patient would not allow admission	0%	0.2%	0.6%	0%	0%	0%	0%
Left before recommendation	10%	5.7%	10.7%	33.3%	15.9%	15.5%	11.2%
Not admitted	27.5%	53.3%	52.2%	66.7%	68.2%	51%	55.1%

Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Appendices 2A-2G may be underestimates.

APPENDIX 2E: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE UNIVERSITY OF LIMERICK HOSPITAL GROUP, 2015

	ENNIS HOSPITAL	NENAGH HOSPITAL	ST. JOHN'S HOSPITAL, LIMERICK	UNIVERSITY HOSPITAL, LIMERICK
	(n=14)	(n=4)	(n=3)	(n=728)
Admitted (general and psychiatric)	14.3%	0%	0%	19.2%
Patient would not allow admission	0%	0%	0%	0.3%
Left before recommendation	0%	25%	0%	10.9%
Not admitted	85.7%	75%	100%	69.6%

APPENDIX 2F: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2015

	GALWAY UNIVERSITY HOSPITAL	LETTERKENNY GENERAL HOSPITAL	MAYO GENERAL HOSPITAL	PORTIUNCULA HOSPITAL, BALLINASLOE	SLIGO REGIONAL HOSPITAL
	(n=483)	(n=294)	(n=254)	(n=174)	(n=226)
Admitted (general and psychiatric)	33.3%	55.1%	34.3%	38.5%	30.5%
Patient would not allow admission	1.2%	1%	3.1%	1.7%	2.2%
Left before recommendation	19%	9.2%	12.2%	12.6%	12.4%
Not admitted	46.4%	34.7%	50.4%	47.1%	54.9%

Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Appendices 2A-2G may be underestimates.

APPENDIX 2G: RECOMMENDED NEXT CARE BY HOSPITAL IN THE HSE CHILDREN'S HOSPITAL GROUP, 2015

	CHILDREN'S UNIVERSITY HOSPITAL AT TEMPLE STREET	NATIONAL CHILDREN'S HOSPITAL AT TALLAGHT HOSPITAL	OUR LADY'S CHILDREN'S HOSPITAL, CRUMLIN
	(n=133)	(n=111)	(n=53)
Admitted (general and psychiatric)	50.4%	83.8%	52.8%
Patient would not allow admission	3.8%	0%	0%
Left before recommendation	0%	0.9%	0%
Not admitted	45.9%	15.3%	47.2%

Note: It may not always be recorded in the emergency department that a patient has been directly admitted to psychiatric inpatient care. Therefore, the figures for direct psychiatric admission detailed in Appendices 2A-2G may be underestimates.

APPENDIX III:

APPENDIX 3A: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE IRELAND EAST HOSPITAL GROUP, 2015

		MATER MISERICORDIAE UNIVERSITY HOSPITAL	MIDLAND REGIONAL HOSPITAL, MULLINGAR	OUR LADY'S HOSPITAL, NAVAN	ST. COLUMCILLE'S HOSPITAL, LOUGHLINSTOWN	ST. LUKE'S HOSPITAL, KILKENNY	ST. MICHAEL'S HOSPITAL, DUN LAOGHAIRE	OTHER	WEXFORD GENERAL HOSPITAL
Number of individuals treated	Men	305	68	80	6	123	14	258	90
	Women	306	108	131	5	153	23	339	137
	Total	611	176	211	11	276	37	597	227
Number who repeated	Men	77	7	13	1	8	1	43	11
	Women	68	12	20	1	22	3	56	16
	Total	145	19	33	2	30	4	99	27
Percentage who repeated	Men	25.2%	10.3%	16.3%	16.7%	6.5%	7.1%	16.7%	12.2%
	Women	22.2%	11.1%	15.3%	20%	14.4%	13%	16.5%	11.7%
	Total	23.7%	10.8%	15.6%	18.2%	10.9%	10.8%	16.6%	11.9%

APPENDIX 3B: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE DUBLIN MIDLANDS HOSPITAL GROUP, 2015

		ADELAIDE AND MEATH HOSPITAL, TALLAGHT	MIDLAND REGIONAL HOSPITAL, PORTLAOISE	MIDLAND REGIONAL HOSPITAL, TULLAMORE	NAAS GENERAL HOSPITAL	ST. JAMES'S HOSPITAL
Number of individuals treated	Men	252	61	53	141	287
	Women	286	92	66	179	290
	Total	538	153	119	320	577
Number who repeated	Men	39	10	2	15	56
	Women	44	19	3	41	50
	Total	83	29	5	56	106
Percentage who repeated	Men	15.5%	16.4%	3.8%	10.6%	19.5%
	Women	15.4%	20.7%	4.5%	22.9%	17.2%
	Total	15.4%	19%	4.2%	17.5%	18.4%

APPENDIX 3C: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE RCSI HOSPITAL GROUP, 2015

		BEAUMONT HOSPITAL	CAVAN GENERAL HOSPITAL	CONNOLLY HOSPITAL, BLANCHARDSTOWN	OUR LADY OF LOURDES HOSPITAL, DROGHEDA
Number of individuals treated	Men	238	77	161	121
	Women	266	112	254	156
	Total	504	189	415	277
Number who repeated	Men	38	13	20	20
	Women	42	12	42	20
	Total	80	25	62	40
Percentage who repeated	Men	16%	16.9%	12.4%	16.5%
	Women	15.8%	10.7%	16.5%	12.8%
	Total	15.9%	13.2%	14.9%	14.4%

APPENDIX 3D: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE SOUTH/SOUTH WEST HOSPITAL GROUP, 2015

		BANTRY GENERAL HOSPITAL	CORK UNIVERSITY HOSPITAL	UNIVERSITY HOSPITAL KERRY	MALLOW GENERAL HOSPITAL	MERCY UNIVERSITY HOSPITAL, CORK	SOUTH TIPPERARY GENERAL HOSPITAL	UNIVERSITY HOSPITAL, WATERFORD
Number of individuals treated	Men	17	322	147	<5	262	100	263
	Women	22	245	136	<5	229	102	332
	Total	39	567	283	6	491	202	595
Number who repeated	Men	1	33	24	0	39	16	45
	Women	1	33	22	0	46	12	47
	Total	2	66	46	0	85	28	92
Percentage who repeated	Men	5.9%	10.2%	16.3%	0%	14.9%	16%	17.1%
	Women	4.5%	13.5%	16.2%	0%	20.1%	11.8%	14.2%
	Total	5.1%	11.6%	16.3%	0%	17.3%	13.9%	15.5%

APPENDIX 3E: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE UNIVERSITY OF LIMERICK HOSPITAL GROUP, 2015

		ENNIS HOSPITAL	NENAGH HOSPITAL	ST. JOHN'S HOSPITAL, LIMERICK	UNIVERSITY HOSPITAL, LIMERICK
Number of individuals treated	Men	<5	<5	<5	263
	Women	6	<5	0	332
	Total	10	<5	<5	595
Number who repeated	Men	2	0	2	45
	Women	3	1	0	47
	Total	5	1	2	92
Percentage who repeated	Men	50%	0%	66.7%	17.1%
	Women	50%	100%	0%	14.2%
	Total	50%	50%	66.7%	15.5%

APPENDIX 3F: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE SAOLTA UNIVERSITY HEALTH CARE GROUP, 2015

		GALWAY UNIVERSITY HOSPITAL	LETTERKENNY GENERAL HOSPITAL	MAYO GENERAL HOSPITAL	PORTIUNCULA HOSPITAL, BALLINASLOE	SLIGO REGIONAL HOSPITAL
Number of individuals treated	Men	166	103	96	67	104
	Women	224	121	117	90	89
	Total	390	224	213	157	193
Number who repeated	Men	29	14	21	9	11
	Women	37	19	18	9	15
	Total	66	33	39	18	26
Percentage who repeated	Men	17.5%	13.6%	21.9%	13.4%	10.6%
	Women	16.5%	15.7%	15.4%	10%	16.9%
	Total	16.9%	14.7%	18.3%	11.5%	13.5%

APPENDIX 3G: REPETITION BY GENDER AND HOSPITAL FOR INDIVIDUALS TREATED IN THE HSE CHILDREN'S HOSPITALS GROUP, 2015

		CHILDREN'S UNIVERSITY HOSPITAL AT TEMPLE STREET	NATIONAL CHILDREN'S HOSPITAL AT TALLAGHT HOSPITAL	OUR LADY'S CHILDREN'S HOSPITAL, CRUMLIN
Number of individuals treated	Men	25	15	9
	Women	87	83	34
	Total	112	98	43
Number who repeated	Men	4	2	1
	Women	18	11	5
	Total	22	13	6
Percentage who repeated	Men	16%	13.3%	11.1%
	Women	20.7%	13.3%	14.7%
	Total	19.6%	13.3%	14%

APPENDIX IV:

APPENDIX 4: SELF-HARM BY RESIDENTS OF THE REPUBLIC OF IRELAND, 2015

	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
Age group	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	183920	0	0	(+/-0)	175976	0	0	(+/-0)
5-9yrs	178276	6	3	(+/-3)	172218	0	0	(+/-0)
10-14yrs	160917	73	45	(+/-11)	153950	274	178	(+/-22)
15-19yrs	145623	530	364	(+/-32)	136521	980	718	(+/-46)
20-24yrs	120413	666	553	(+/-43)	114540	653	570	(+/-45)
25-29yrs	139990	560	400	(+/-34)	151755	439	289	(+/-28)
30-34yrs	172626	459	266	(+/-25)	190650	466	244	(+/-23)
35-39yrs	180877	458	253	(+/-24)	188964	435	230	(+/-22)
40-44yrs	173995	360	207	(+/-22)	176613	442	250	(+/-24)
45-49yrs	159207	288	181	(+/-21)	159444	342	214	(+/-23)
50-54yrs	145837	224	154	(+/-21)	149146	312	209	(+/-24)
55-59yrs	128539	162	126	(+/-20)	130516	189	145	(+/-21)
60-64yrs	114277	89	78	(+/-17)	115882	113	98	(+/-18)
65-69yrs	100080	55	55	(+/-15)	101917	75	74	(+/-17)
70-74yrs	72671	29	40	(+/-15)	75960	39	51	(+/-16)
75-79yrs	51609	24	47	(+/-19)	59248	15	25	(+/-13)
80-84yrs	32846	11	33	(+/-20)	43638	12	27	(+/-16)
85yrs+	21941	8	36	(+/-26)	43638	3	7	(+/-8)
Total**	2283643	4002	186	(+/-6)	2340576	4789	222	(+/-6)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4A: SELF-HARM BY RESIDENTS OF THE HSE DUBLIN/MID-LEINSTER REGION, 2015

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	53945	0	0	(+/-0)	51965	0	0	(+/-0)
5-9yrs	51113	0	0	(+/-0)	49989	0	0	(+/-0)
10-14yrs	46654	17	36	(+/-18)	44492	86	193	(+/-42)
15-19yrs	41717	145	348	(+/-58)	39499	305	772	(+/-88)
20-24yrs	36491	166	455	(+/-71)	35918	191	532	(+/-77)
25-29yrs	46312	159	343	(+/-54)	50179	118	235	(+/-43)
30-34yrs	56516	122	216	(+/-39)	61021	147	241	(+/-40)
35-39yrs	54426	144	265	(+/-44)	56989	117	205	(+/-38)
40-44yrs	51416	89	173	(+/-37)	52414	124	237	(+/-42)
45-49yrs	45479	79	174	(+/-39)	46092	95	206	(+/-42)
50-54yrs	41318	57	138	(+/-37)	43501	95	218	(+/-45)
55-59yrs	35928	48	134	(+/-39)	37708	63	167	(+/-42)
60-64yrs	31335	21	67	(+/-29)	32610	39	120	(+/-38)
65-69yrs	26631	10	38	(+/-24)	27888	24	86	(+/-35)
70-74yrs	18984	11	58	(+/-35)	20894	15	72	(+/-37)
75-79yrs	13703	4	29	(+/-29)	16217	8	49	(+/-35)
80-84yrs	8564	3	35	(+/-40)	12016	3	25	(+/-29)
85yrs+	5740	2	35	(+/-49)	11918	2	17	(+/-24)
Total**	666271	1077	166	(+/-10)	691308	1432	222	(+/-11)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4B: SELF-HARM BY RESIDENTS OF THE HSE DUBLIN/NORTH EAST REGION, 2015

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	44740	0	0	(+/-0)	42820	0	0	(+/-0)
5-9yrs	40392	0	0	(+/-0)	38951	0	0	(+/-0)
10-14yrs	35098	19	54	(+/-25)	33189	73	220	(+/-51)
15-19yrs	30448	134	440	(+/-76)	28049	238	849	(+/-110)
20-24yrs	24567	152	619	(+/-100)	25110	169	673	(+/-104)
25-29yrs	33954	134	395	(+/-68)	37837	120	317	(+/-58)
30-34yrs	44025	117	266	(+/-49)	48161	121	251	(+/-46)
35-39yrs	43941	110	250	(+/-48)	45906	137	298	(+/-51)
40-44yrs	40079	96	240	(+/-49)	40555	120	296	(+/-54)
45-49yrs	34993	83	237	(+/-52)	34546	83	240	(+/-53)
50-54yrs	30373	54	178	(+/-48)	31263	86	275	(+/-59)
55-59yrs	25484	28	110	(+/-42)	26236	46	175	(+/-52)
60-64yrs	22223	17	76	(+/-37)	23287	28	120	(+/-45)
65-69yrs	19803	20	101	(+/-45)	20892	26	124	(+/-49)
70-74yrs	14612	6	41	(+/-34)	15461	8	52	(+/-37)
75-79yrs	10193	5	49	(+/-44)	12474	3	24	(+/-28)
80-84yrs	6288	2	32	(+/-45)	8808	4	45	(+/-45)
85yrs+	4200	1	24	(+/-48)	8473	1	12	(+/-24)
Total**	505413	978	205	(+/-12)	522019	1263	263	(+/-14)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4C: SELF-HARM BY RESIDENTS OF THE HSE SOUTH REGION, 2015

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	43600	0	0	(+/-0)	42600	0	0	(+/-0)
5-9yrs	44200	4	9	(+/-9)	43800	0	0	(+/-0)
10-14yrs	40600	23	57	(+/-24)	40000	65	163	(+/-40)
15-19yrs	37500	162	432	(+/-68)	36000	261	725	(+/-90)
20-24yrs	32700	226	691	(+/-92)	29900	160	535	(+/-85)
25-29yrs	33500	158	472	(+/-75)	35800	109	304	(+/-58)
30-34yrs	38400	136	354	(+/-61)	44200	111	251	(+/-48)
35-39yrs	44000	122	277	(+/-50)	46500	102	219	(+/-43)
40-44yrs	44000	112	255	(+/-48)	44000	110	250	(+/-48)
45-49yrs	41300	69	167	(+/-40)	41700	90	216	(+/-46)
50-54yrs	38900	68	175	(+/-42)	39200	81	207	(+/-46)
55-59yrs	34600	47	136	(+/-40)	34300	51	149	(+/-42)
60-64yrs	30900	38	123	(+/-40)	30500	27	89	(+/-34)
65-69yrs	27000	14	52	(+/-28)	27200	17	63	(+/-30)
70-74yrs	19800	10	51	(+/-32)	20600	10	49	(+/-31)
75-79yrs	14100	13	92	(+/-51)	15900	3	19	(+/-22)
80-84yrs	9000	3	33	(+/-38)	11900	2	17	(+/-24)
85yrs+	6000	3	50	(+/-58)	11600	0	0	(+/-0)
Total**	580100	1208	223	(+/-12)	595700	1199	219	(+/-12)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

APPENDIX 4D: SELF-HARM BY RESIDENTS OF THE HSE WEST REGION, 2015

Age group	MEN				WOMEN			
		SELF-HARM				SELF-HARM		
	Population	Persons	Rate	95% CI*	Population	Persons	Rate	95% CI*
0-4yrs	41636	0	0	(+/-0)	38591	0	0	(+/-0)
5-9yrs	42571	2	5	(+/-7)	39478	0	0	(+/-0)
10-14yrs	38564	14	36	(+/-19)	36269	50	138	(+/-39)
15-19yrs	35957	89	248	(+/-52)	32974	173	525	(+/-80)
20-24yrs	26655	118	443	(+/-82)	23612	131	555	(+/-97)
25-29yrs	26224	107	408	(+/-79)	27939	91	326	(+/-68)
30-34yrs	33685	82	243	(+/-54)	37268	85	228	(+/-49)
35-39yrs	38511	79	205	(+/-46)	39569	77	195	(+/-44)
40-44yrs	38501	61	158	(+/-41)	39644	87	219	(+/-47)
45-49yrs	37435	55	147	(+/-40)	37107	73	197	(+/-46)
50-54yrs	35246	44	125	(+/-38)	35181	49	139	(+/-40)
55-59yrs	32527	39	120	(+/-38)	32272	29	90	(+/-33)
60-64yrs	29818	13	44	(+/-24)	29485	19	64	(+/-30)
65-69yrs	26646	11	41	(+/-25)	25937	8	31	(+/-22)
70-74yrs	19275	2	10	(+/-15)	19004	6	32	(+/-26)
75-79yrs	13613	2	15	(+/-21)	14658	1	7	(+/-14)
80-84yrs	8993	3	33	(+/-39)	10914	3	27	(+/-32)
85yrs+	6001	2	33	(+/-47)	11647	0	0	(+/-0)
Total**	531859	723	154	(+/-10)	531549	882	188	(+/-11)

*95% Confidence Interval. **The total rates are European age-standardised rates per 100,000.

EVE GRIFFIN
ELLA ARENSMAN
CHRISTINA B DILLON
PAUL CORCORAN
EILEEN WILLIAMSON
IVAN J PERRY

4th Floor
Western Gateway Building
University College Cork
Ireland
Tel: +353 21 420 5551
Email: info@nsrf.ie
www.nsrf.ie